STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3
AMENDED REPORT ☑

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER
GDU 63-5-12

2. TYPE OF WORK
DRILL NEW WELL ◉ REENTER P&A WELL ○ DEEPEN WELL ○

3. FIELD OR WILDCAT
UNDESIGNATED

4. TYPE OF WELL
Gas Well Coalbed Methane Well: NO

5. UNIT or COMMUNITIZATION AGREEMENT NAME
GILSONITE DRAW

6. NAME OF OPERATOR
VANTAGE ENERGY UINTA LLC

7. OPERATOR PHONE
303 386-8600

8. ADDRESS OF OPERATOR
116 Inverness Drive East, Ste 107, Englewood , CO, 80112

9. OPERATOR E-MAIL
john.moran@vantageenergy.com

10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)
UTU78235

11. MINERAL OWNERSHIP
FEDERAL ◉ INDIAN ○ STATE ○ FEE ○

12. SURFACE OWNERSHIP
FEDERAL ◉ INDIAN ○ STATE ○ FEE ○

13. NAME OF SURFACE OWNER (if box 12 = 'fee')

14. SURFACE OWNER PHONE (if box 12 = 'fee')

15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')

16. SURFACE OWNER E-MAIL (if box 12 = 'fee')

17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')

18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS
YES ○ (Submit Commingling Application) NO ◉

19. SLANT
VERTICAL ○ DIRECTIONAL ◉ HORIZONTAL ○

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	750 FNL 1804 FWL	NENW	5	6.0 S	3.0 W	U
Top of Uppermost Producing Zone	660 FNL 1980 FWL	NENW	5	6.0 S	3.0 W	U
At Total Depth	660 FNL 1980 FWL	NENW	5	6.0 S	3.0 W	U

21. COUNTY
DUCHESNE

22. DISTANCE TO NEAREST LEASE LINE (Feet)
660

23. NUMBER OF ACRES IN DRILLING UNIT
2250

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
205

26. PROPOSED DEPTH
MD: 6205 TVD: 6200

27. ELEVATION - GROUND LEVEL
6773

28. BOND NUMBER
LPM8907971

29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE
49-1501

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
SURF	12.25	8.625	0 - 300	24.0	J-55 ST&C	0.0	Class G	225	1.17	15.8
PROD	7.875	5.5	0 - 6205	15.5	K-55 LT&C	8.9	Premium Lite High Strength	129	3.5	11.0
							50/50 Poz	403	1.25	14.4

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ COMPLETE DRILLING PLAN
- ☐ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)
- ☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
- ☐ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)
- ☑ TOPOGRAPHICAL MAP

NAME David F. Banko **TITLE** Permit Agent **PHONE** 303 820-4480

SIGNATURE **DATE** 07/26/2011 **EMAIL** david@banko1.com

API NUMBER ASSIGNED
43013508970000

APPROVAL

Permit Manager

Vantage Energy Uinta LLC
GDU 63-5-12 (Formerly 63-5-11)
SHL: 750' FNL, 1804' FWL
BHL: ± 660' FNL, ± 1980' FWL
Sec. 5, T6S R3W
Duchesne County, Utah
Federal Lease UTU-78235

NINE POINT DRILLING PROGRAM

(All drilling procedures will comply with BLM *Onshore Oil and Gas Orders 1 and 2*)

Operator respectfully requests that all information regarding this well be kept confidential.

a) GEOLOGIC MARKERS
Anticipated tops of geologic markers are indicated in **Table 1**

Table 1 Estimated Tops of Geologic Markers

Formation	Vertical Depth	Measured Depth	Subsea Depth	Description
Green River	Surface	Surface	6,788'	Sandstone/siltstone/shale
Garden Gulch	3,491'	3,495'	3,297'	Sandstone/siltstone/shale
Douglas Creek	4,428'	4,433'	2,360'	Sandstone/siltstone/shale
Castle Peak	5,313'	5,318'	1,475'	Sandstone/siltstone/shale
Uteland Butte	5,788'	5,793'	1,000'	Carbonate/shale/sandstone
Wasatch	5,998'	6,003'	790'	Shale/sandstone
Total Depth	6,200'	6,205'	588'	TD ± 200' TVD into Wasatch

Surface Elevation: 6,773' (Ground) 6,788' (Est. KB). Proposed Total Depth: 6,205' / 6,200' (MD/TVD)

b) DEPTHS OF WATER AND MINERAL-BEARING ZONES
Potential water-bearing zones in the vicinity include the Wasatch and Green River formations (Robson and Banta, 1995. *Ground Water Atlas of the United States Segment 2*, Hydrologic Investigations Atlas 730-C, U.S. Geological Survey, Reston, VA). A review of data from the Utah Division of Water Rights indicate no permitted water wells within a one mile radius of the proposed location. Utah Divison of Oil, Gas, and Mining surface casing depth requirements will protect potential aquifers in the area.

The depths to potential water and/or mineral-bearing zones are indicated in **Table 2**.

Table 2: Principal Anticipated Water and Mineral-bearing Zones

Formation	Measured Depth	Subsea	Potential Contents
Green River	Surface	6,788'	Surface – Possible Water
Garden Gulch	3,495'	3,297'	Possible Water
Douglas Creek	4,433'	2,360'	Oil / Gas
Castle Peak	5,318'	1,475'	Oil / Gas
Uteland Butte	5,793'	1,000'	Oil / Gas
Wasatch	6,003'	790'	Oil / Gas

c) MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

The maximum anticipated surface pressure for this well is calculated to be **1,364 psi**. Therefore, rules for a 2,000 psi rated BOP and choke manifold system are applicable. However, the typical rig inventory will consist of a 3,000 psi rated BOP and choke manifold. As such, the rig's BOP and choke manifold equipment will be tested to the standards for a 2,000 psi BOP system. A diagram of the proposed 2,000 psi rated BOP stack configuration is shown in **Fig. 1**.

BOPs and choke manifold will be installed and pressure tested before drilling out from under surface casing (subsequent pressure tests will be performed whenever pressure seals are broken) and then will be checked daily as to mechanical operating condition. BOPs will be pressure tested at least once every 30 days. The annular preventer, pipe rams, and blind rams will be activated on each trip and Operator will conduct weekly BOP drills with the rig crew. Both manual and remote closing mechanisms will be installed on the BOP stack and will be readily available to the driller.

Ram type preventers and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. **Please see variance request at end of program for this section.**

Annular type preventers will be pressure tested to 50% of their rated working pressure. A Sundry Notice (Form 3160~5), along with a copy of BOP test report, shall be submitted to the BLM within 5 working days following the test. All casings strings will be pressure tested to 0.22psi/ft or 1,500psi, whichever is greater, not to exceed 70% of internal yield. **Please see variance request at end of program for this section.**

Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with *Onshore Oil and Gas Order No. 2* for 2,000 psi systems. Irregardless of the rig selected, the rig's accumulator system shall have sufficient capacity to close all BOP equipment and retain 200 psi above precharge pressure. The proposed pressure control equipment will meet or exceed standards specified in the Order.

d) CASING PROGRAM

Casing of quality equal to or better than that indicated in **Tables 3** and **4** will be used for this well. Actual casing used will be dependent on availability.

Table 3 Proposed Casing Program

Depth (MD)	Hole Diameter	Casing Diameter	Casing Weight and Grade
0 – ± 40'	20"	14"	Optional Conductor – Only if Required
0 – 300'	12 1/4"	8 5/8"	24# J55 ST&C, API New Pipe
0 – 6,205'	7 7/8"	5 1/2"	15.5# K55 LT&C, API New Pipe

Table 4: Proposed Casing Specifications and Design Safety Factors

Size	Collapse (psi)	Burst (psi)	Body Strength (1,000 lbs.)	Joint Strength (1,000 lbs.)	Thread	*Safety Factors		
						Burst Design (1.2)	Collapse Design (1.0)	Tension Design (1.4)
14"	NA – 0.219" wall structural and to seal shallow gravels to allow air drilling surface hole				Weld	NA	NA	NA
8 5/8" 24# J55	1,370	2,950	381	244	ST&C	1.96	5.55	4.26
5 1/2" 15.5# J55	4,040	4,810	248	217	LT&C	1.25	1.48	1.63

***Safety Factor Calculation Assumptions:**

Surface Casing:

Burst Load: Assumes greater of MASP (maximum anticipated surface pressure) exposure during a worse case kick scenario while drilling at total depth, with mud/gas mixture whose gradient is 0.22 psi/ft. OR, minimum required casing test pressure.

MASP
Load = (Formation Gradient – 0.22 psi/ft) * Total Depth, TVD
= (0.44 psi/ft – 0.22 psi/ft) * 6,200 ft.
= 1,364 psi

TEST PRESSURE
Load = Greater of 1,500 psig *or* 0.22 psi/ft * 300 ft = 66 psig
Load = Greatter of 1,500 psig *or* 1,364 psig *or* 66 psig
SF Burst = 2,950 psi / 1,500 psi = 1.96

Collapse Load: Assumes worse case loading of evacuated casing during cementing process.
Cement density = 15.8 ppg
Load = 15.8 ppg * 0.052 * 300 ft
= 246.5 psi
SF Collapse = 1370 psi / 246.5 psi = 5.55

Tension Load: Assumes air weight at total depth + 50,000 lbs overpull design factor.
Load = (24 lbs/ft * 300 ft) + 50,000 lbs overpull
= 57,200 lbs
SF Tension = 244,000 lbs / 57,200 lbs = 4.26

Test Pressure =

Production Casing

Burst Load: Assumes maximum load applied during the hydraulic fracture stimulations. It is Vantage Energy's policy not to exceed 80% rating of the production casing during the stimulation treatment. The 80% rating factor will also be the casing test pressure.

Load = 4810 psi * 0.80
= 3848 psi
SF Burst = 4810 psi / 3848 psi = 1.25

Collapse Load: Assumes worse case loading applied during the production cycle, with evacuated casing, and normally pressured formation gradient applied externally.

Load = 0.44 psi/ft * 6200 ft
= 2728 psi
SF Collapse = 4040 psi / 2728 psi = 1.48

Tension Load: Assumes buoyed weight of casing at total depth + 50,000 lbs overpull design factor.

Load = [15.5 lbs/ft * 6205 ft* ((65.5 – 9.0) / 65.5)] + 50,000 lbs
= 83,738 lbs + 50,000 lbs
= 132,962 lbs
SF Tension = 217,000 lbs / 132,962 lbs = 1.63

e) CEMENT PROGRAM

Table 5: Proposed Cement Program

Depth	Hole Diameter	Casing Diameter	Cement
0' – ± 40'	20"	14"	Optional structural conductor if required: Grout with approximately 3.5 cubic yards of redi-mix back to surface (includes 100% excess) **TOC: Surface (Top-off per visual observation)**

Depth	Hole Diameter	Casing Diameter	Cement
0' – 300'	12 1/4"	8 5/8"	**Single Slurry System (300' – Surface) + 40' Shoe Joint** 225 sks Class G + 2% $CaCl_2$ + ¼ lb/sk celloflake. Density: 15.8 ppg Yield: 1.17 cuft/sk Water: 5.0 gal/sk Excess = 100% in open hole **TOC: Surface (Top-off per visual observation)**
0' - 6,205'	7 7/8"	5 1/2"	**Lead System (4,000' – 2,000')** 129 sks Premium Lite II +0.05 lbs/sk Static Free + 3% KCL + + ¼ lb/sk celloflake + 3 lbs/sk Kol Seal + 0.002 gps FP-6L + 10% gel + 0.5% Sodium Metasillicate + 5 lbs/sk CSE-2 Density: 11.0 ppg Yield: 3.50 cuft/sk Water: 21.4 gal/sk *Excess: 30% **Tail System (6,205' – 4,000') + 40' Shoe Joint** 403 sks 50:50 (Class G:Poz) + 0.05 lbs/sk Static Free + 0.15% R-3 + 3% KCL + 0.5% EC-1 + ¼ lb/sk celloflake + 0.5% FL-25 + 0.002 gps FP-6L + 2% gel + 0.3% Sodium Metasillicate Density: 14.4 ppg Yield: 1.25 cuft/sk Water: 5.48 gal/sk *Excess: 30% **TOC: 2,000'**

*Note: The production hole cement volume excess factor will be adjusted on location by the caliper log, and will be re-calculated using caliper volume + 10% excess factor.

f) MUD PROGRAM

The mud program for the proposed well is indicated in **Table 6.**

Table 6 Proposed Mud Program (See attached Advantage mud program)

Interval (feet)	Mud Weight (lbs/gallon)	Viscosity (secs/qt)	Fluid Loss (ccs/30 min)	Mud Type
0 – ± 40'	NA	NA	NA	NA
Set optional 14" conductor with bucket rig				
40' - 300'±	NA	NA	N/C	Air/Mist
Run/cement 8 5/8" surface casing				
300'± - 3,500'	8.3 – 8.9	28 – 48	10 - 18	FW / PHPA
3,500' - TD	8.4 – 8.9	34 – 58	8 - 10	3% KCL / PHPA
Run Logs – Run/cement 5 1/2" production casing				

Surface Hole Comments: Spud with "spudder rig" and air drill surface hole misting as may be required to assist with cuttings removal. Report any water encountered to the appropriate agencies. **Please see variance requests for this section.**

Production Hole Comments: Drill out surface casing with fresh water using pre-hydrated gel and PHPA polymer mud sweeps to assist with hole cleaning. At approximately 3,500' "mud up" and "close in" the fluid system to a 2-3% KCL base fluid. Use PHPA PAC and lignite for filtration control. Maintain fluid system through potential production zones to TD. Should seepage losses be experienced, control with LCM sweeps consisting of calcium carbonate, sawdust, cedar fiber, or mica.

Sufficient mud materials will be maintained on location to adequately maintain mud properties and control lost circulation zones that may be encountered. Monitoring equipment will be installed on site to detect changes in mud volume.

g) LOGGING, CORING, AND TESTING PROGRAM
The proposed logging program is indicated in **Table 7**.

Table 7 Proposed Logging Program

Log Suites	Depth Range	Remarks
DIL-SP-LD-CN	Surface Casing to TD	Standard "triple combo" equivalent with resistivity-spontaneous potential, litho-density, compensated neutron, gamma ray, and caliper Will pull GR to surface
Dipole Sonic	± 4,000' to TD	Optional – Operator's discretion Rock property data
Rotary Sidewall Cores	± 4,000' to TD	Optional – Operator's discretion PP/Lithology data (perm-porosity)

No coring or drill stem tests are planned. Mud logging unit will be operational from 200 feet above the Douglas Creek through total depth. Cuttings will be sampled every 20-30 feet.

Prospective zones from the Douglas Creek formation through total depth will be perforated, tested, and potentially acid-washed. It is anticipated that multi-stage hydraulic fracture stimulations of the reservoir will be required.

h) ANTICIPATED PRESSURES AND HAZARDS

No abnormal pressures are anticipated. Pressure gradient in the Green River and Wasatch sequence is expected to be sub-normal pressured to less than 0.44 psi/ft.

Estimated BHP Douglas Creek (4,428')	1,948 psi
Estimated BHP Wasatch (5,998')	2,639 psi
Estimated BHP Total Depth (6,200')	2,728 psi
Hydrostatic head of gas/mud column	0.22 psi/ft.
Maximum design surface pressure	0.44 – 0.22 psi/ft x 6,200 ft = **1,364 psi**

No H2S zones are anticipated. Lost circulation can be encountered. A variety of sized lost circulation materials will be maintained on location in the event lost circulation is experienced. No abnormal lost circulation zones are anticipated. The proposed well is a southern extension test of producing wells in T5S-R3W. Abnormal pressures will not be experienced to the proposed depth in this area.

i) DIRECTIONAL PROGRAM (See attached directional plan by Weatherford)

The GDU 63-5-12 will be drilled as a directional well, with a bottom hole located in the center of NE¼ NW¼ Section 5, T6S-R3W on a 40-acre spacing pattern. The vertical section distance between the surface and the bottom hole is 198'. The bottom hole will be landed within a 200' radius target tolerance on all sides except the north line, where a minimum drift of 50' will be used as target tolerance to maintain a 600' setback from the section north line (unit boundary). The directional plan will consist of a build-and-drop "S" profile, with a planned KOP of 500', and a build/drop rate of 1.5°/100'.

The purpose of the directional well is to establish an "ideal" 40-acre drainage pattern for future development considerations.

j) OTHER INFORMATION

Contact Information and Personnel

Mailing Address

Vantage Energy Uinta LLC
116 Inverness Drive, Suite 107
Englewood, CO 80112
Main Number: 303-386-8600
Fax Number: 303-386-8700

Primary Contact: Seth Urruty
Office Direct: 303-386-8623
Fax Direct: 303-386-8723
Mobile: 303-815-7678
E-Mail: Seth.Urruty@VantageEnergy.com

Drilling Operations: John Moran
Office Direct: 303-386-8610
Fax Direct: 303-386-8710
Mobile: 303-249-2234
E-Mail: John.Moran@VantageEnergy.com

Completion/Production Operations: Eric Burkhalter
Office Direct: 303-386-8621
Fax Direct: 303-386-8721
Mobile: 817-480-5227
E-Mail: Eric.Burkhalter@VantageEnergy.com

Geologist: Karen Wagner
Office Direct: 303-386-8626
Fax Direct: 303-386-8726
Mobile: 720-903-0740
E-Mail: Karen.Wagner@VantageEnergy.com

Landman: Michael Holland
Office Direct: 303-386-8638
Fax Direct: 303-386-8738
Mobile: 303-396-3443
E-Mail: Michael.Holland@VantageEnergy.com

START DATE AND DURATION OF ACTIVITIES

Anticipated start date

The drilling operations will commence as soon as possible following contracting of drilling rig and in compliance with restrictions imposed by lease stipulations and/or Conditions of Approval. It is therefore anticipated the access upgrade work and location work would commence on or about June 15, 2011, with a target spud date of July 1, 2011. It is anticipated the drilling phase will require 7 days.

Completion

The well pad will be of sufficient size to accommodate all required completion equipment and activities. It is anticipated select intervals will be perforated, stimulated and adequately tested for the presence of commercial hydrocarbons prior to moving uphole to the next prospective test interval. As such, it is anticipated the completion phase will require 45 days.

The total project duration is therefore estimated to be **52 days**, and therefore anticipated to be concluded on or about August 21, 2011.

A string of 2 7/8 inch 6.5 lb/ft. J-55 tubing would be run as the production tubing. A Sundry Notice will be submitted should there be any changes to the proposed completion program.

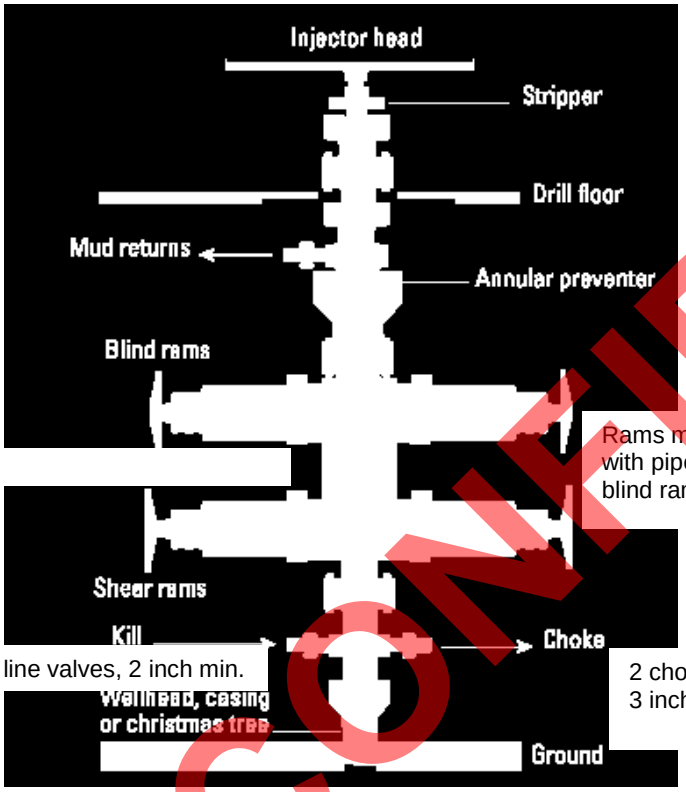
VARIANCE REQUESTS

1. Operator requests a variance to *Onshore Oil and Gas Order 2, Item B, No. 1h*, regulations requiring the surface casing be tested to the greater of 1500 psig, or 70% of the minimum internal yield.
    a. The MASP for this well is calculated to be 1,364 psig, while the 70% yield rating is 2,065 psig.
    b. Operator therefore requests approval to test the surface casing to the lesser value of 1,500 psig which is greater than the MASP value.
2. Operator requests a variance to *Onshore Oil and Gas Order 2, Item A*, regulations which outline test pressures for 3M pressure control systems.
    a. The drilling contractor's standard inventory will consist of 3M pressure control systems; however, as cited above, the MASP for this well is calculated to be 1,364 psig. As such, 2M pressure control equipment is sufficient for the drilling of this well.
    b. Operator therefore requests approval to test contractor's 3M BOPE to 2M pressure system standards. The double ram preventer will be tested to 2,000 psig, and the annular preventer will be tested to 1,500 psig. Safety valves and choke/kill valves and lines will all be tested to 2,000 psig.
3. Operator requests a variance to *Onshore Oil and Gas Order 2, Item E*, regulations for air/gas drilling operations. Operator plans to "pre-set" the surface casing and drill the surface hole to a depth of 300', with a "spud rig", in a separate operation from the drilling rig. No hydrocarbons are present in the surface hole section and therefore, "gas" drilling is not applicable to this hole section. Therefore, for the purpose only of drilling the surface hole with an air rig, Operator requests the following four (4) variances from the order that states "…the following equipment shall be in place and operational during air/gas drilling: (1) properly lubricated and maintained rotating head; (2) blooie line discharge one hundred feet (100') from wellbore; (3) automatic igniter or continuous pilot light on the blooie line; and (4) compressor located…a minimum of 100 feet (100') from the wellbore".
    a. Operator requests approval to use a diverter bowl rather then a rotating head as specified in the Order. The diverter bowl forces air and cuttings to the reserve pit and is only used to drill the surface hole (to a total depth of 300'). The surface hole section is non-hydrocarbon bearing, and therefore formation pressures will not require a pressure rated rotating head. Should water flows be encountered, they will be reported to the appropriate agencies.
    b. Operator requests approval to use a blooie line with a discharge length of less than the required one hundred feet (100') from the wellbore in order to minimize the well pad size, and to direct the cuttings into the reserve pit. The wellbore is to be located approximately thirty-five feet (35') from the reserve pit which is to be seventy feet (70') wide. Therefore, a one hundred foot (100') blooie line would blow cuttings across the reserve pit. The requested length of blooie line to drill the surface hole is thirty-five feet (35'). This is the distance necessary to reach the edge of the reserve pit, and to therefore direct cuttings into the reserve pit in a safe and efficient manner.

c. Operator requests approval to operate without an automatic igniter or continuous pilot light on the blooie line. The surface hole section is non-hydrocarbon bearing and therefore does not require a continuous ignition source.
d. Operator requests approval to use a trailer mounted air compressor located less than one hundred feet (100') from the wellbore in order to minimize the location size. The compressor will be located fifty feet (50') from the wellbore in an opposite direction of the blooie line. The compressor has the following safety features: (1) shut-off valve on the trailer located approximately fifteen feet (15') from the air rig; (2) pressure relief valve on the compressor; and (3) spark arrestors on the motors. The compressor will only be used for the drilling of the surface hole, which is non-hydrocarbon bearing.

Figure 1: Pressure Control Schematic
Operator and Well Name
Location
County and State

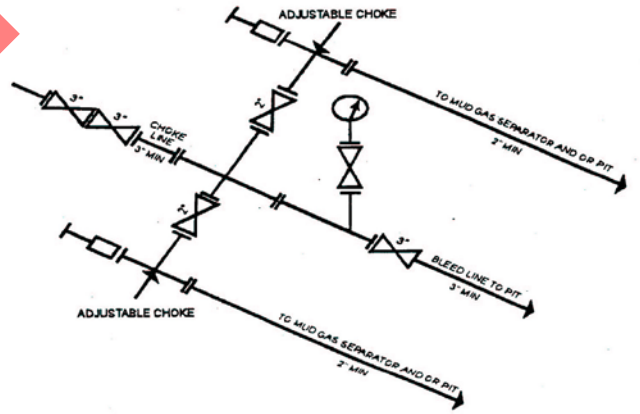
Generalized Setup for 2,000 psi Working Pressure System
Actual BOP Stack Used May Vary in Some Details



Rams may be reversed, with pipe rams above blind rams

2 kill line valves, 2 inch min.

2 chokes and lines, 3 inch minimum

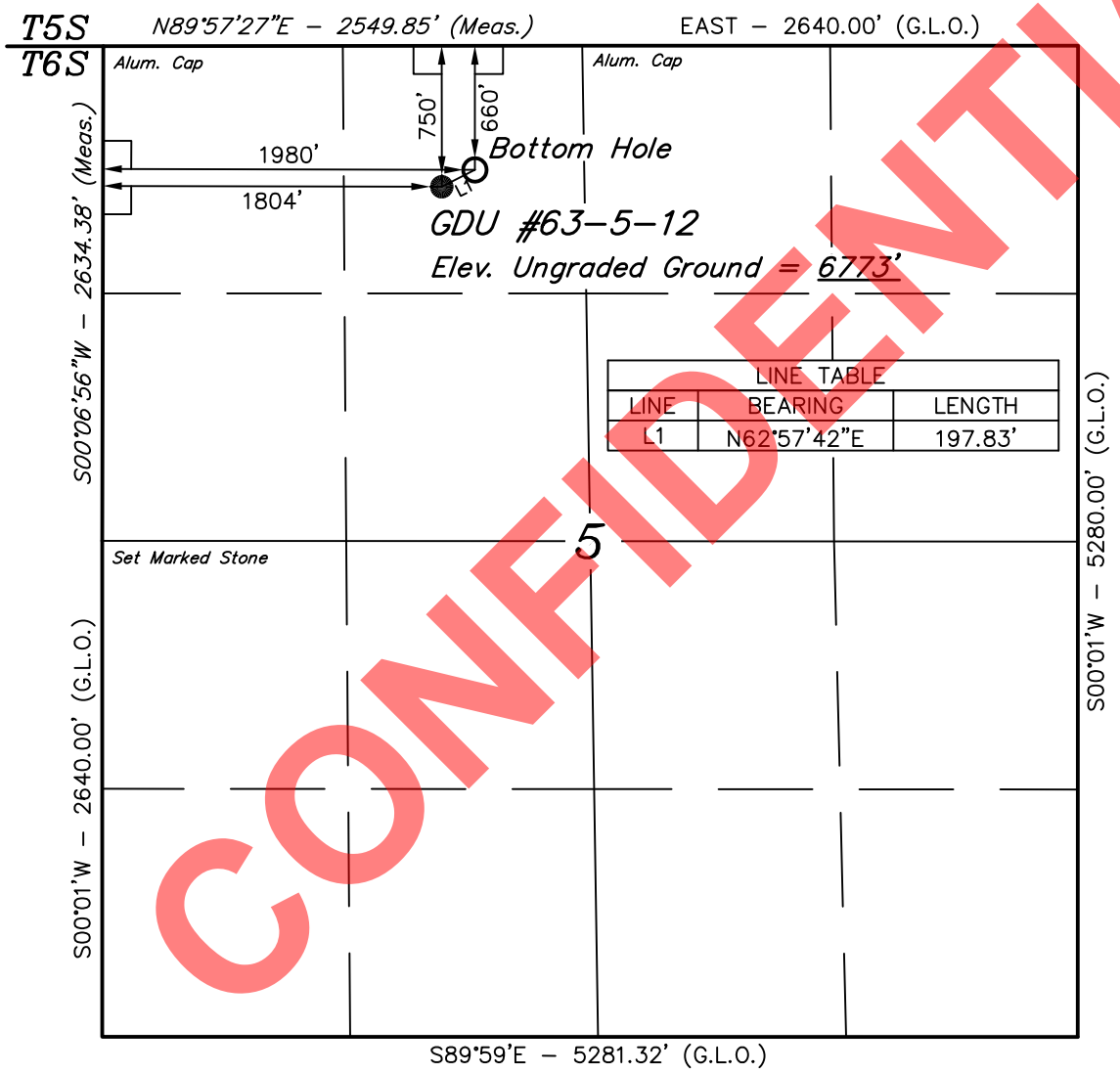


3M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY
[54 FR 39528, Sept. 27, 1989]

Installed BOP Stack Will Meet All Requirements of BLM Onshore Oil and Gas Order 2

API Well Number: 43013508970000

T6S, R3W, U.S.B.&M.



LINE TABLE		
LINE	BEARING	LENGTH
L1	N62°57'42"E	197.83'

Vantage Energy Uinta LLC

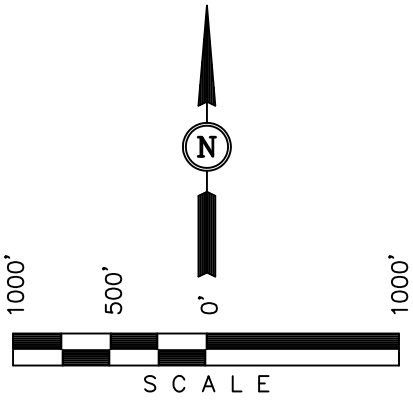
Well location, GDU #63–5–12, located as shown in the NE 1/4 NW 1/4 of Section 5, T6S, R3W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M. TAKEN FROM THE DUCHESNE SE QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6097 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REVISED: 02–25–11
REVISED: 01–22–09

LEGEND:

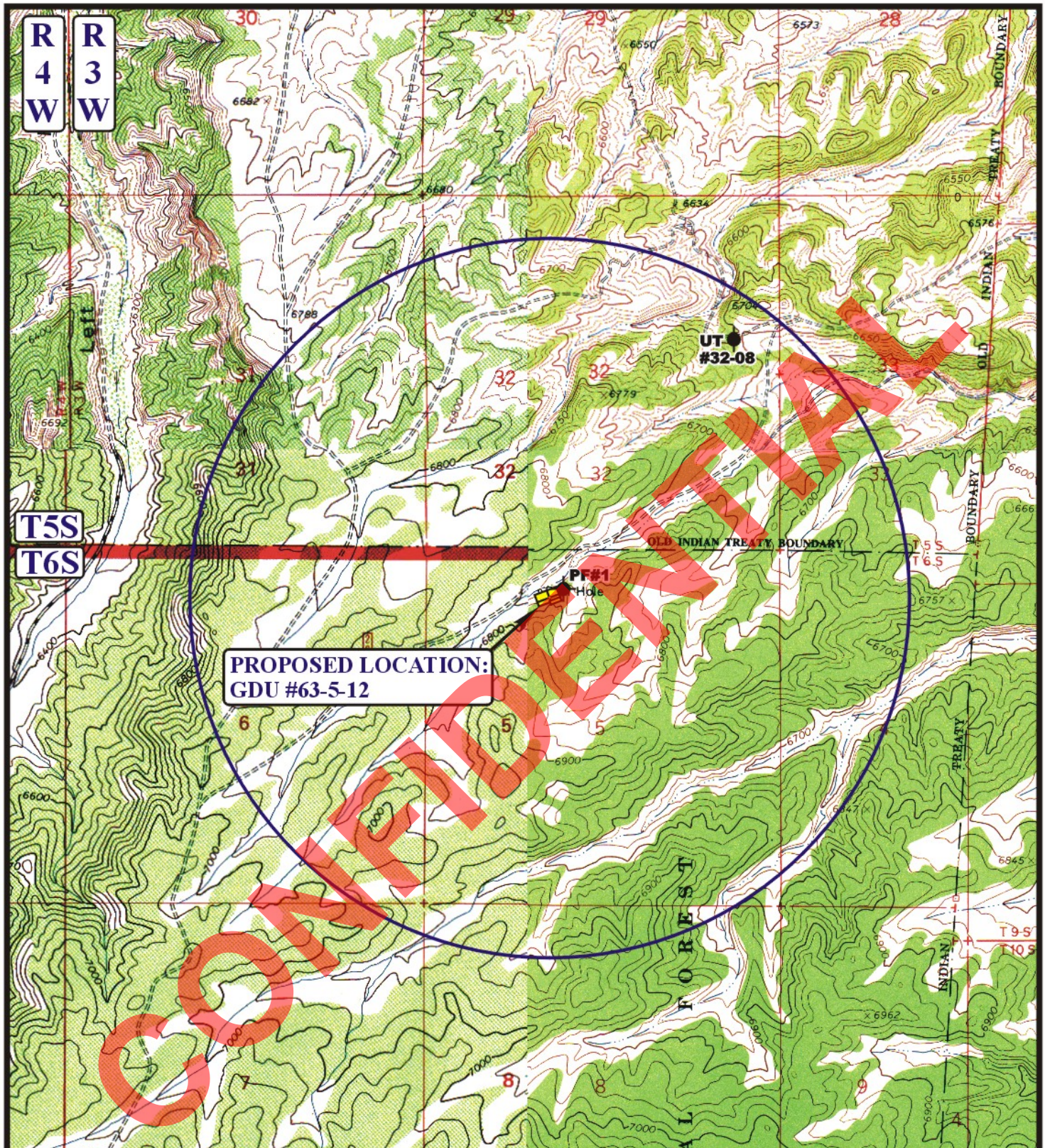
- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 39°59'38.71" (39.994086)	LATITUDE = 39°59'37.82" (39.993839)
LONGITUDE = 110°14'56.92" (110.249144)	LONGITUDE = 110°14'59.19" (110.249775)
NAD 27 (TARGET BOTTOM HOLE)	**NAD 27 (SURFACE LOCATION)**
LATITUDE = 39°59'38.84" (39.994122)	LATITUDE = 39°59'37.95" (39.993875)
LONGITUDE = 110°14'54.37" (110.248436)	LONGITUDE = 110°14'56.64" (110.249067)

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789–1017

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	12–17–08	12–18–08
PARTY: M.A. D.R. A.H. C.C.	REFERENCES: G.L.O. PLAT	
WEATHER: COLD	FILE: Vantage Energy Uinta LLC	

API Well Number: 43013508970000



LEGEND:

- DISPOSAL WELLS
- WATER WELLS
- PRODUCING WELLS
- ABANDONED WELLS
- SHUT IN WELLS
- TEMPORARILY ABANDONED

N

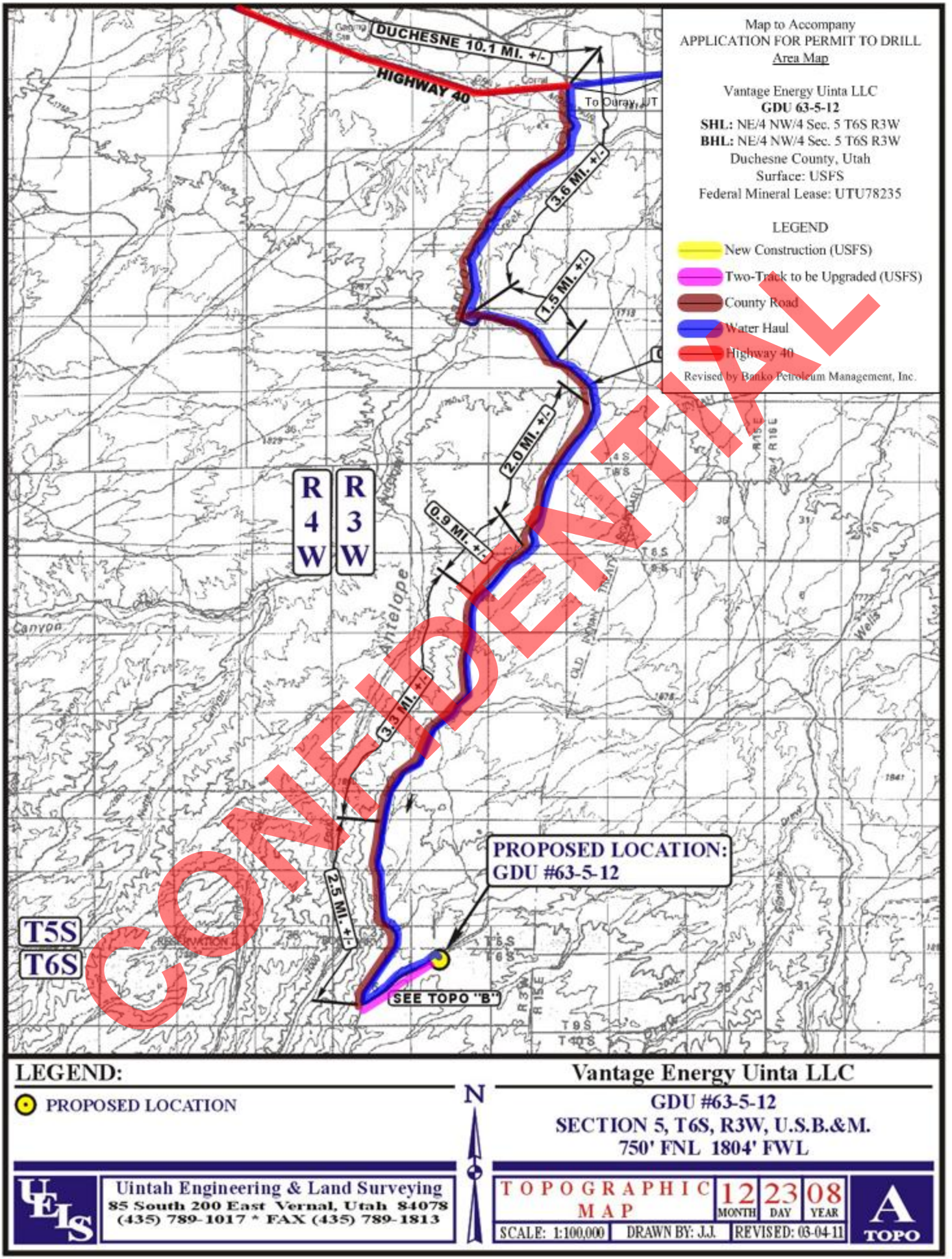
Vantage Energy Uinta LLC

GDU #63-5-12
SECTION 5, T6S, R3W, U.S.B.&M.
750' FNL 1804' FWL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	12 MONTH	23 DAY	08 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: J.J.	REVISED: 02-25-11		

API Well Number: 43013508970000



LEGEND:

PROPOSED LOCATION

N

Vantage Energy Uinta LLC

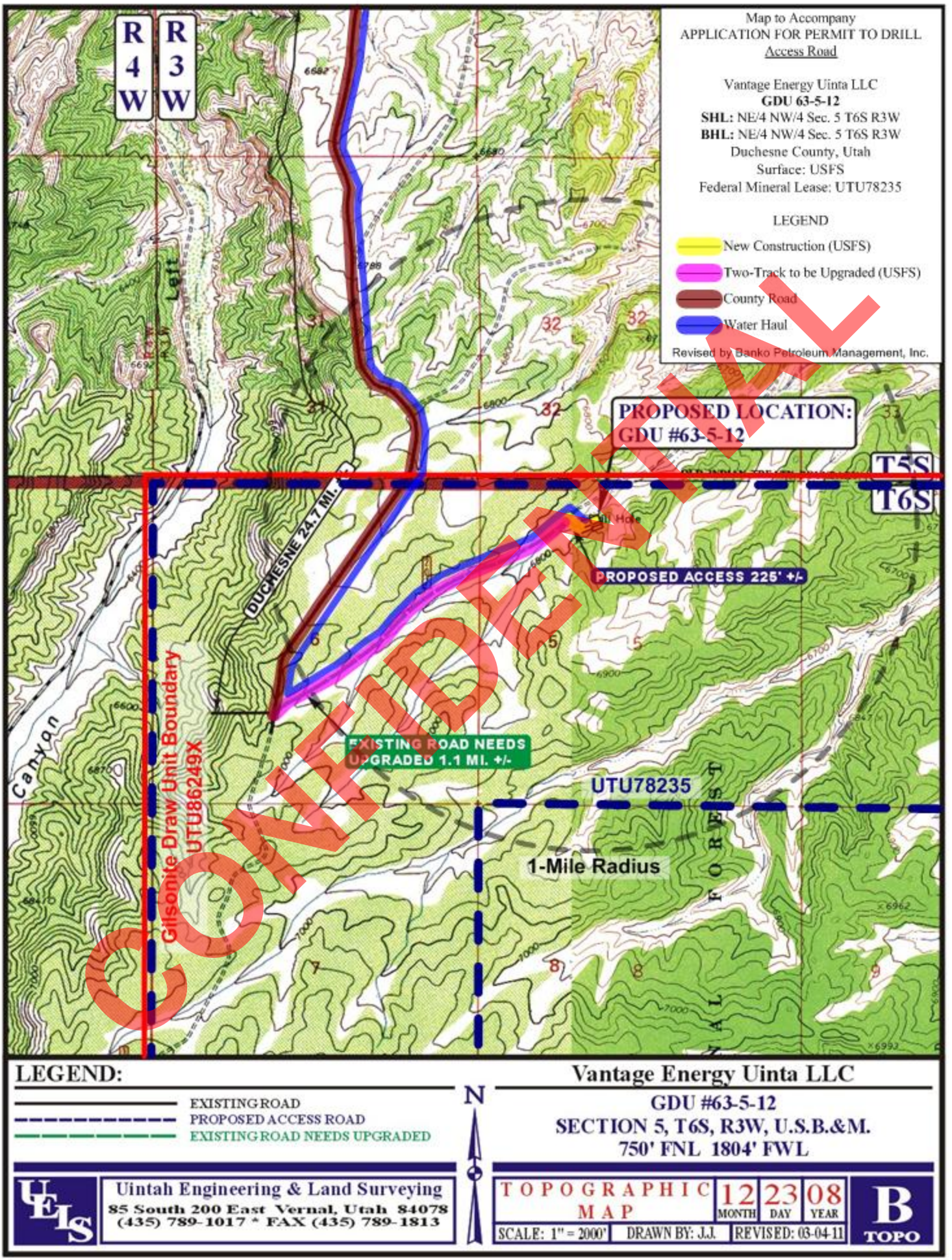
GDU #63-5-12

SECTION 5, T6S, R3W, U.S.B.&M.

750' FNL 1804' FWL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	12 MONTH	23 DAY	08 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: J.J.	REVISED: 03-04-11		


Map to Accompany
APPLICATION FOR PERMIT TO DRILL
Access Road
Vantage Energy Uinta LLC
GDU 63-5-12
SHL: NE/4 NW/4 Sec. 5 T6S R3W
BHL: NE/4 NW/4 Sec. 5 T6S R3W
Duchesne County, Utah
Surface: USFS
Federal Mineral Lease: UTU78235
LEGEND
New Construction (USFS)
Two-Track to be Upgraded (USFS)
County Road
Water Haul
Revised by Banko Petroleum Management, Inc.
R 4 W
R 3 W
PROPOSED LOCATION:
GDU #63-5-12
T5S
T6S
DUCHESNE 24.7 MI. +/-
PROPOSED ACCESS 225' +/-
EXISTING ROAD NEEDS UPGRADED 1.1 MI. +/-
Gilsonite Draw Unit Boundary
UTU86249X
UTU78235
1-Mile Radius
Left Hand Canyon
CONFIDENTIAL
LEGEND:
EXISTING ROAD
PROPOSED ACCESS ROAD
EXISTING ROAD NEEDS UPGRADED
N
Vantage Energy Uinta LLC
GDU #63-5-12
SECTION 5, T6S, R3W, U.S.B.&M.
750' FNL 1804' FWL
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813
TOPOGRAPHIC MAP
12 MONTH
23 DAY
08 YEAR
SCALE: 1" = 2000'
DRAWN BY: J.J.
REVISED: 03-04-11
B TOPO

VANTAGE ENERGY

Ms. Diana Mason
State of Utah
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114

July 6, 2011

Re: Directional Drilling R649-3-11
Vantage Energy Uinta, LLC
GDU 63-5-12
SHL: 750' FNL 1,804' FWL (NE/4 NW/4)
BHL: ±660' FNL ±1,980' FWL (NE/4 NW/4)
Sec. 5 T6S R3E
Duchesne County, Utah
Surface: Federal
Mineral: Federal Mineral Lease UTU78235

Dear Ms. Mason:

With regards to the filing of Vantage Energy Uinta LLC's (Vantage) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11, pertaining to the Exception of Location and Sitting of Wells.

- GDU 63-5-12 is an exploratory well located within the Gilsonite Draw Federal Unit No. UTU86249X.
- Vantage is permitting this well as stipulated by the United States Forest Service as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Vantage will be able to utilize any proposed roads and or pipelines in the area.
- Vantage is the unit operator of the Gilsonite Draw Federal Unit. As it pertains to all depths from the surface to the base of the Wasatch Formation, Vantage certifies it is the sole working interest owner within 460 feet of the entire directional well bore and within Section 5 (federal oil and gas lease UTU 78235). As to all depths deeper than the Base of the Wasatch Formation, the sole working interest owner is Exxon Mobil Corporation (XOM). Vantage and XOM have entered into a mutually executed Exploration Agreement that provides for the possible development of those deeper depths.

Based on the above stated information, Vantage requests the permit be granted pursuant to the terms and conditions of Rule R649-3-11.

Sincerely,
VANTAGE ENERGY UINTA, LLC

Michael Holland
Senior Landman

Cc: mth, jm, rs, tt, kh, su, David Banko, Kim Rodell (Banko Petroleum Management)

APPLICATION FOR PERMIT TO DRILL OPERATOR CERTIFICATION

Operator
Vantage Energy LLC
116 Inverness Dr. E, #107
Englewood, CO 80112
Contact: John Moran

Contact Information:

Office: 303-386-8610
Mobile: 303-249-2234
Fax: 303-386-8710
e-mail: john.moran@vantageenergy.com

Certification

Operator will conduct all operations outlined in this APD package in accordance with applicable Onshore Oil and Gas Orders and any applicable Notices to Lessees. Operator is responsible for the actions of its subcontractors. A copy of the Surface Use Plan of Operations will be furnished to each subcontractor to ensure compliance. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Operator under its Utah statewide BLM bond "LPM8907971".

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that I have full knowledge of state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Operator, its contractors and subcontractors in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements

Executed this 16th day of March 2011.

John Moran
Senior Engineer, Vantage Energy LLC

Weatherford®

Drilling Services

Proposal

VANTAGE ENERGY

VANTAGE ENERGY

GDU 63-5-12
FILE: PLAN 1
MARCH 1, 2011

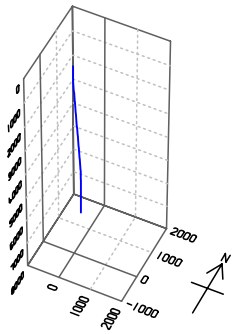
Weatherford International Ltd.
410 17th Street
Denver, Colorado 80202
+1.303.825.6558 Main
+1.303.825.2927 Fax
www.weatherford.com

API Well Number: 43013508970000

VANTAGE ENERGY

Project:	DUCHESNE COUNTY, UT
Site:	GDU 63-5-12
Well:	GDU #63-5-12
Wellbore:	GDU #63-5-12
Design:	Design #1
Latitude:	39° 59' 37.820 N
Longitude:	110° 14' 59.190 W
GL:	6773.00
KB:	WELL @ 6788.00ft (Original Well Elev)
RIG:	Original Well Elev

Weatherford



WELL DETAILS: GDU #63-5-12

Ground Level: 6773.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	7168927.39	1990669.44	39° 59' 37.820 N	110° 14' 59.190 W	

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL GDU #63-5-12	6200.00	90.05	176.66	39° 59' 38.710 N	110° 14' 56.920 W	Point

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
699.09	2.99	62.99	699.00	2.36	4.62	1.50	62.99	5.19	Start 3606.90 hold at 699.09 MD
4305.99	2.99	62.99	4301.00	87.70	172.04	0.00	0.00	193.10	Start Drop -1.50
4505.08	0.00	0.00	4500.00	90.05	176.66	1.50	180.00	198.28	Start 1700.00 hold at 4505.08 MD
6205.08	0.00	0.00	6200.00	90.05	176.66	0.00	0.00	198.28	TD at 6205.08

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3491.00	3494.89	Garden Gulch
4428.00	4433.07	Douglas Creek
5313.00	5318.08	Castle Peak
5788.00	5793.08	Uteland Butte
5998.00	6003.08	Wasatch

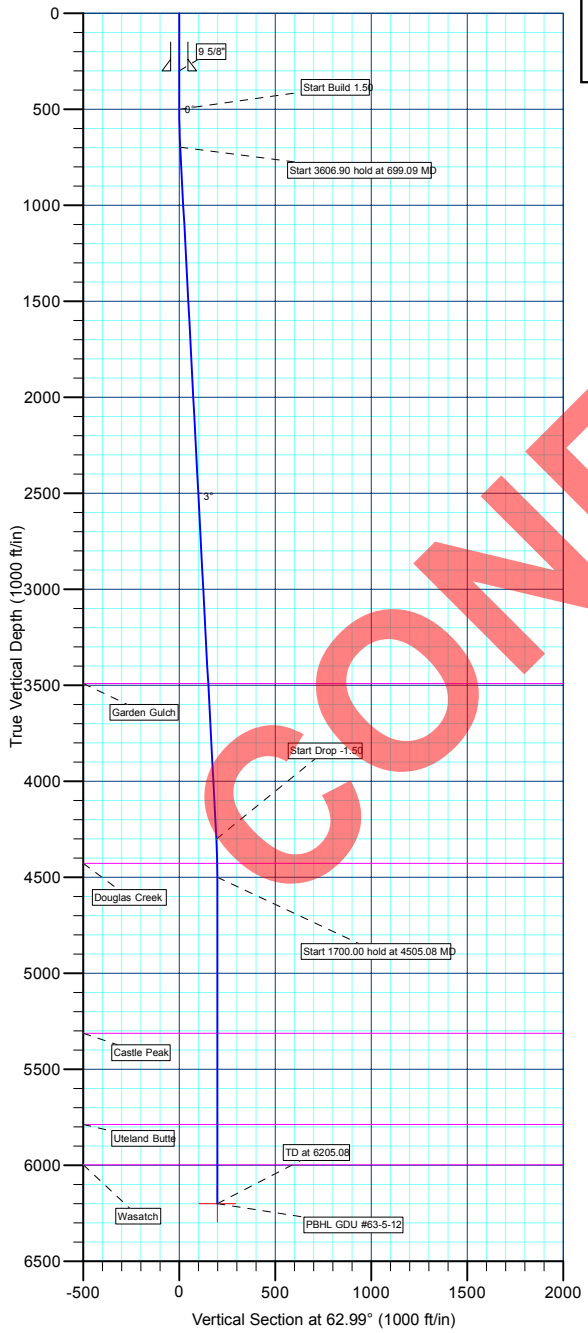
CASING DETAILS

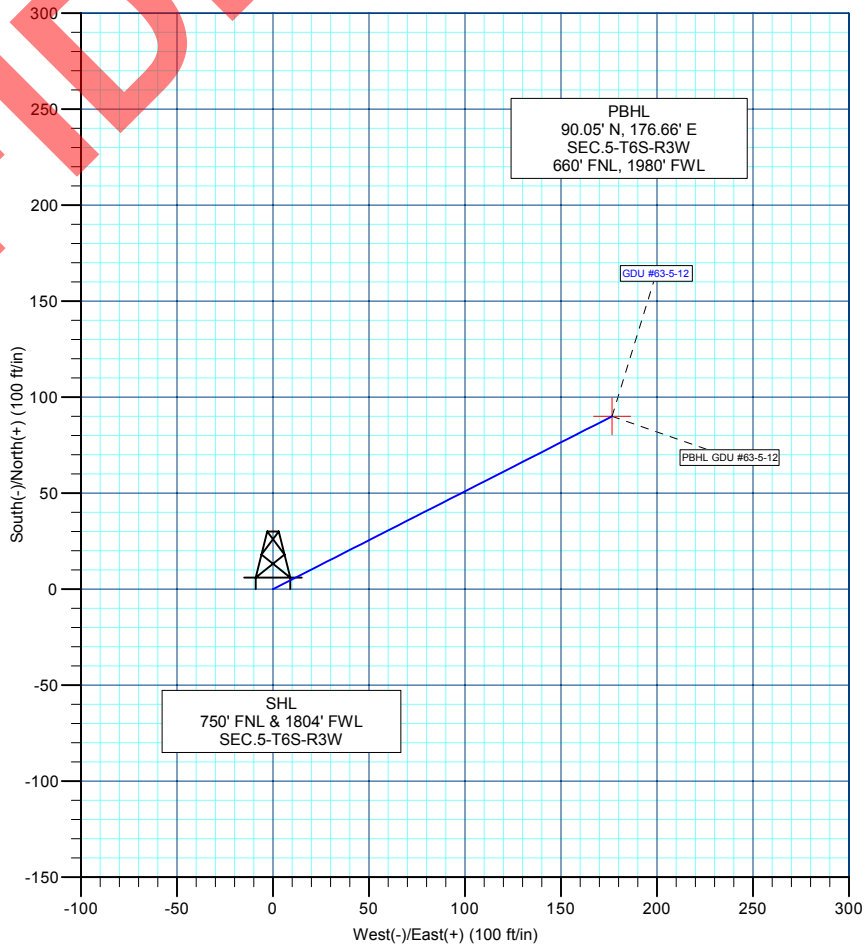
TVD	MD	Name	Size
300.00	300.00	9 5/8"	9-5/8

T M

Azimuths to True North
Magnetic North: 11.45°

Magnetic Field
Strength: 52207.4snT
Dip Angle: 65.74°
Date: 3/1/2011
Model: BGGM2010





Plan: Design #1 (GDU #63-5-12/GDU #63-5-12)

Created By: TRACY WILLIAMS Date: 11:12, March 01 2011

VANTAGE ENERGY

VANTAGE ENERGY

DUCHESNE COUNTY, UT
GDU 63-5-12
GDU #63-5-12

GDU #63-5-12

Plan: Design #1

Standard Planning Report

01 March, 2011

Weatherford®

VANTAGE ENERGY

Weatherford International Ltd.

Planning Report

Weatherford

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well GDU #63-5-12
Company:	VANTAGE ENERGY	**TVD Reference:**	WELL @ 6788.00ft (Original Well Elev)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 6788.00ft (Original Well Elev)
Site:	GDU 63-5-12	**North Reference:**	True
Well:	GDU #63-5-12	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	GDU #63-5-12		
Design:	Design #1		

Project DUCHESNE COUNTY, UT

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site GDU 63-5-12

Site Position:		**Northing:**	7,168,927.39 ft	**Latitude:**	39° 59' 37.820 N
From:	Lat/Long	**Easting:**	1,990,669.44 ft	**Longitude:**	110° 14' 59.190 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.80 °

Well GDU #63-5-12

Well Position	**+N/-S**	0.00 ft	**Northing:**	7,168,927.39 ft	**Latitude:**	39° 59' 37.820 N
	+E/-W	0.00 ft	**Easting:**	1,990,669.44 ft	**Longitude:**	110° 14' 59.190 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,773.00 ft

Wellbore GDU #63-5-12

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	3/1/2011	11.45	65.74	52,207

Design Design #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	62.99

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
699.09	2.99	62.99	699.00	2.36	4.62	1.50	1.50	0.00	62.99	
4,305.99	2.99	62.99	4,301.00	87.70	172.04	0.00	0.00	0.00	0.00	
4,505.08	0.00	0.00	4,500.00	90.05	176.66	1.50	-1.50	0.00	180.00	
6,205.08	0.00	0.00	6,200.00	90.05	176.66	0.00	0.00	0.00	0.00	PBHL GDU #63-5-1

VANTAGE ENERGY

Weatherford International Ltd.

Planning Report

Weatherford

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well GDU #63-5-12
Company:	VANTAGE ENERGY	**TVD Reference:**	WELL @ 6788.00ft (Original Well Elev)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 6788.00ft (Original Well Elev)
Site:	GDU 63-5-12	**North Reference:**	True
Well:	GDU #63-5-12	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	GDU #63-5-12		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	1.50	62.99	599.99	0.59	1.17	1.31	1.50	1.50	0.00
Start 3606.90 hold at 699.09 MD									
699.09	2.99	62.99	699.00	2.36	4.62	5.19	1.50	1.50	0.00
800.00	2.99	62.99	799.77	4.74	9.31	10.44	0.00	0.00	0.00
900.00	2.99	62.99	899.64	7.11	13.95	15.65	0.00	0.00	0.00
1,000.00	2.99	62.99	999.50	9.48	18.59	20.86	0.00	0.00	0.00
1,100.00	2.99	62.99	1,099.37	11.84	23.23	26.07	0.00	0.00	0.00
1,200.00	2.99	62.99	1,199.23	14.21	27.87	31.28	0.00	0.00	0.00
1,300.00	2.99	62.99	1,299.09	16.57	32.51	36.49	0.00	0.00	0.00
1,400.00	2.99	62.99	1,398.96	18.94	37.15	41.70	0.00	0.00	0.00
1,500.00	2.99	62.99	1,498.82	21.31	41.80	46.91	0.00	0.00	0.00
1,600.00	2.99	62.99	1,598.69	23.67	46.44	52.12	0.00	0.00	0.00
1,700.00	2.99	62.99	1,698.55	26.04	51.08	57.33	0.00	0.00	0.00
1,800.00	2.99	62.99	1,798.41	28.40	55.72	62.54	0.00	0.00	0.00
1,900.00	2.99	62.99	1,898.28	30.77	60.36	67.75	0.00	0.00	0.00
2,000.00	2.99	62.99	1,998.14	33.14	65.00	72.96	0.00	0.00	0.00
2,100.00	2.99	62.99	2,098.01	35.50	69.64	78.17	0.00	0.00	0.00
2,200.00	2.99	62.99	2,197.87	37.87	74.29	83.38	0.00	0.00	0.00
2,300.00	2.99	62.99	2,297.74	40.23	78.93	88.59	0.00	0.00	0.00
2,400.00	2.99	62.99	2,397.60	42.60	83.57	93.80	0.00	0.00	0.00
2,500.00	2.99	62.99	2,497.46	44.97	88.21	99.01	0.00	0.00	0.00
2,600.00	2.99	62.99	2,597.33	47.33	92.85	104.22	0.00	0.00	0.00
2,700.00	2.99	62.99	2,697.19	49.70	97.49	109.43	0.00	0.00	0.00
2,800.00	2.99	62.99	2,797.06	52.06	102.13	114.64	0.00	0.00	0.00
2,900.00	2.99	62.99	2,896.92	54.43	106.78	119.85	0.00	0.00	0.00
3,000.00	2.99	62.99	2,996.79	56.80	111.42	125.06	0.00	0.00	0.00
3,100.00	2.99	62.99	3,096.65	59.16	116.06	130.27	0.00	0.00	0.00
3,200.00	2.99	62.99	3,196.51	61.53	120.70	135.48	0.00	0.00	0.00
3,300.00	2.99	62.99	3,296.38	63.89	125.34	140.69	0.00	0.00	0.00
3,400.00	2.99	62.99	3,396.24	66.26	129.98	145.90	0.00	0.00	0.00
Garden Gulch									
3,494.89	2.99	62.99	3,491.00	68.50	134.39	150.84	0.00	0.00	0.00
3,500.00	2.99	62.99	3,496.11	68.63	134.63	151.11	0.00	0.00	0.00
3,600.00	2.99	62.99	3,595.97	70.99	139.27	156.32	0.00	0.00	0.00
3,700.00	2.99	62.99	3,695.83	73.36	143.91	161.53	0.00	0.00	0.00
3,800.00	2.99	62.99	3,795.70	75.72	148.55	166.74	0.00	0.00	0.00
3,900.00	2.99	62.99	3,895.56	78.09	153.19	171.95	0.00	0.00	0.00
4,000.00	2.99	62.99	3,995.43	80.46	157.83	177.16	0.00	0.00	0.00
4,100.00	2.99	62.99	4,095.29	82.82	162.47	182.37	0.00	0.00	0.00
4,200.00	2.99	62.99	4,195.16	85.19	167.12	187.58	0.00	0.00	0.00
Start Drop -1.50									
4,305.99	2.99	62.99	4,301.00	87.70	172.04	193.10	0.00	0.00	0.00
4,400.00	1.58	62.99	4,394.93	89.40	175.37	196.84	1.50	-1.50	0.00
Douglas Creek									
4,433.07	1.08	62.99	4,428.00	89.74	176.05	197.61	1.50	-1.50	0.00

VANTAGE ENERGY

Weatherford International Ltd.

Planning Report

Weatherford

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well GDU #63-5-12
Company:	VANTAGE ENERGY	**TVD Reference:**	WELL @ 6788.00ft (Original Well Elev)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 6788.00ft (Original Well Elev)
Site:	GDU 63-5-12	**North Reference:**	True
Well:	GDU #63-5-12	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	GDU #63-5-12		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start 1700.00 hold at 4505.08 MD									
4,505.08	0.00	0.00	4,500.00	90.05	176.66	198.28	1.50	-1.50	0.00
4,600.00	0.00	0.00	4,594.92	90.05	176.66	198.28	0.00	0.00	0.00
4,700.00	0.00	0.00	4,694.92	90.05	176.66	198.28	0.00	0.00	0.00
4,800.00	0.00	0.00	4,794.92	90.05	176.66	198.28	0.00	0.00	0.00
4,900.00	0.00	0.00	4,894.92	90.05	176.66	198.28	0.00	0.00	0.00
5,000.00	0.00	0.00	4,994.92	90.05	176.66	198.28	0.00	0.00	0.00
5,100.00	0.00	0.00	5,094.92	90.05	176.66	198.28	0.00	0.00	0.00
5,200.00	0.00	0.00	5,194.92	90.05	176.66	198.28	0.00	0.00	0.00
5,300.00	0.00	0.00	5,294.92	90.05	176.66	198.28	0.00	0.00	0.00
Castle Peak									
5,318.08	0.00	0.00	5,313.00	90.05	176.66	198.28	0.00	0.00	0.00
5,400.00	0.00	0.00	5,394.92	90.05	176.66	198.28	0.00	0.00	0.00
5,500.00	0.00	0.00	5,494.92	90.05	176.66	198.28	0.00	0.00	0.00
5,600.00	0.00	0.00	5,594.92	90.05	176.66	198.28	0.00	0.00	0.00
5,700.00	0.00	0.00	5,694.92	90.05	176.66	198.28	0.00	0.00	0.00
Uteland Butte									
5,793.08	0.00	0.00	5,788.00	90.05	176.66	198.28	0.00	0.00	0.00
5,800.00	0.00	0.00	5,794.92	90.05	176.66	198.28	0.00	0.00	0.00
5,900.00	0.00	0.00	5,894.92	90.05	176.66	198.28	0.00	0.00	0.00
6,000.00	0.00	0.00	5,994.92	90.05	176.66	198.28	0.00	0.00	0.00
Wasatch									
6,003.08	0.00	0.00	5,998.00	90.05	176.66	198.28	0.00	0.00	0.00
6,100.00	0.00	0.00	6,094.92	90.05	176.66	198.28	0.00	0.00	0.00
6,205.08	0.00	0.00	6,200.00	90.05	176.66	198.28	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL GDU #63-5-12 - plan hits target center - Point	0.00	0.00	6,200.00	90.05	176.66	7,169,019.90	1,990,844.82	39° 59' 38.710 N	110° 14' 56.920 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
300.00	300.00	9 5/8"	9-5/8	12-1/4

VANTAGE ENERGY

Weatherford International Ltd.

Planning Report

Weatherford

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well GDU #63-5-12
Company:	VANTAGE ENERGY	**TVD Reference:**	WELL @ 6788.00ft (Original Well Elev)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 6788.00ft (Original Well Elev)
Site:	GDU 63-5-12	**North Reference:**	True
Well:	GDU #63-5-12	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	GDU #63-5-12		
Design:	Design #1		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,494.89	3,491.00	Garden Gulch		0.00	
4,433.07	4,428.00	Douglas Creek		0.00	
5,318.08	5,313.00	Castle Peak		0.00	
5,793.08	5,788.00	Uteland Butte		0.00	
6,003.08	5,998.00	Wasatch		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
500.00	500.00	0.00	0.00	Start Build 1.50
699.09	699.00	2.36	4.62	Start 3606.90 hold at 699.09 MD
4,305.99	4,301.00	87.70	172.04	Start Drop -1.50
4,505.08	4,500.00	90.05	176.66	Start 1700.00 hold at 4505.08 MD
6,205.08	6,200.00	90.05	176.66	TD at 6205.08

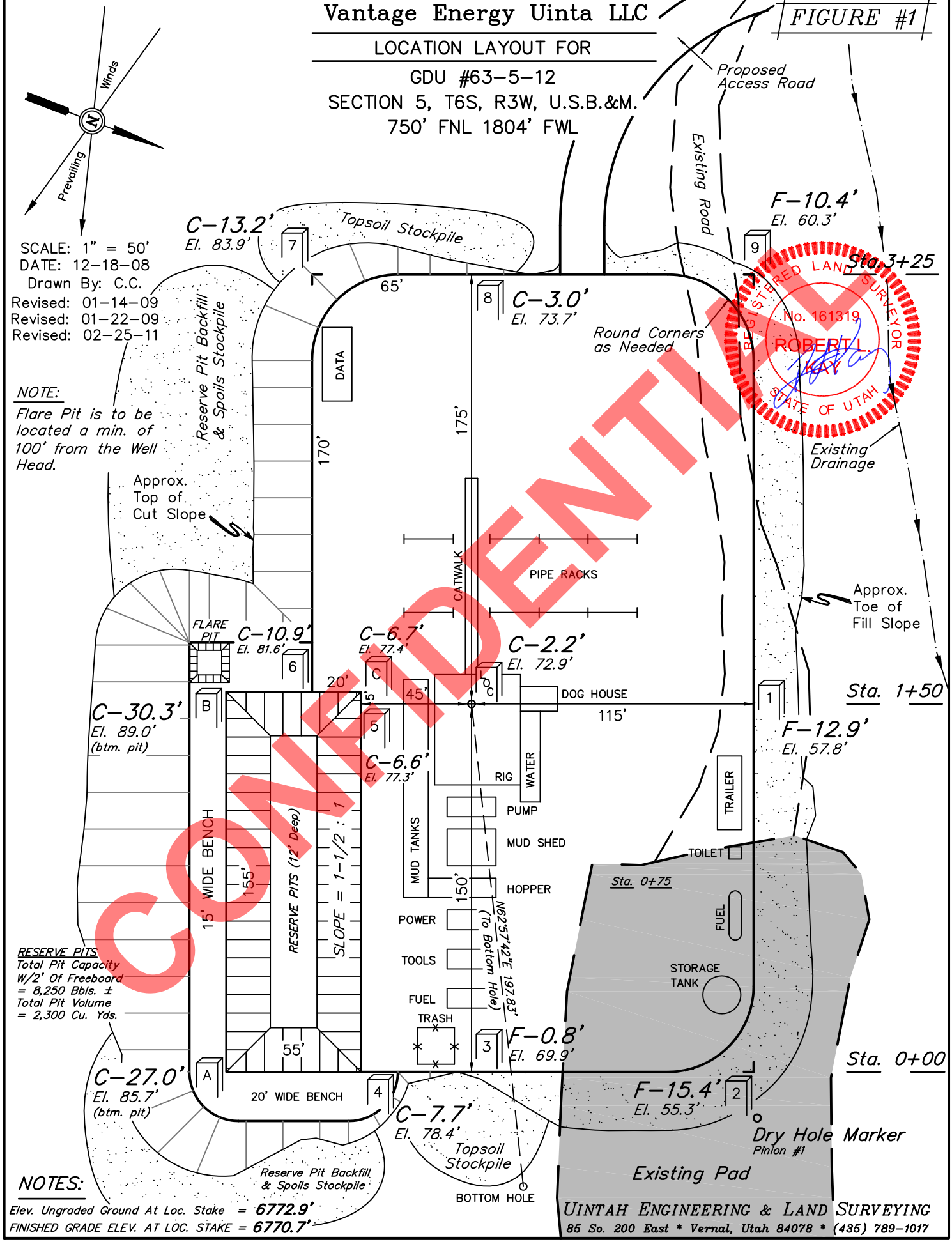
API Well Number: 43013508970000

Vantage Energy Uinta LLC

LOCATION LAYOUT FOR

GDU #63-5-12
SECTION 5, T6S, R3W, U.S.B.&M.
750' FNL 1804' FWL

FIGURE #1



REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH

NOTES:

Elev. Ungraded Ground At Loc. Stake = 6772.9'
FINISHED GRADE ELEV. AT LOC. STAKE = 6770.7'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

API Well Number: 43013508970000

Vantage Energy Uinta LLC

TYPICAL CROSS SECTIONS FOR

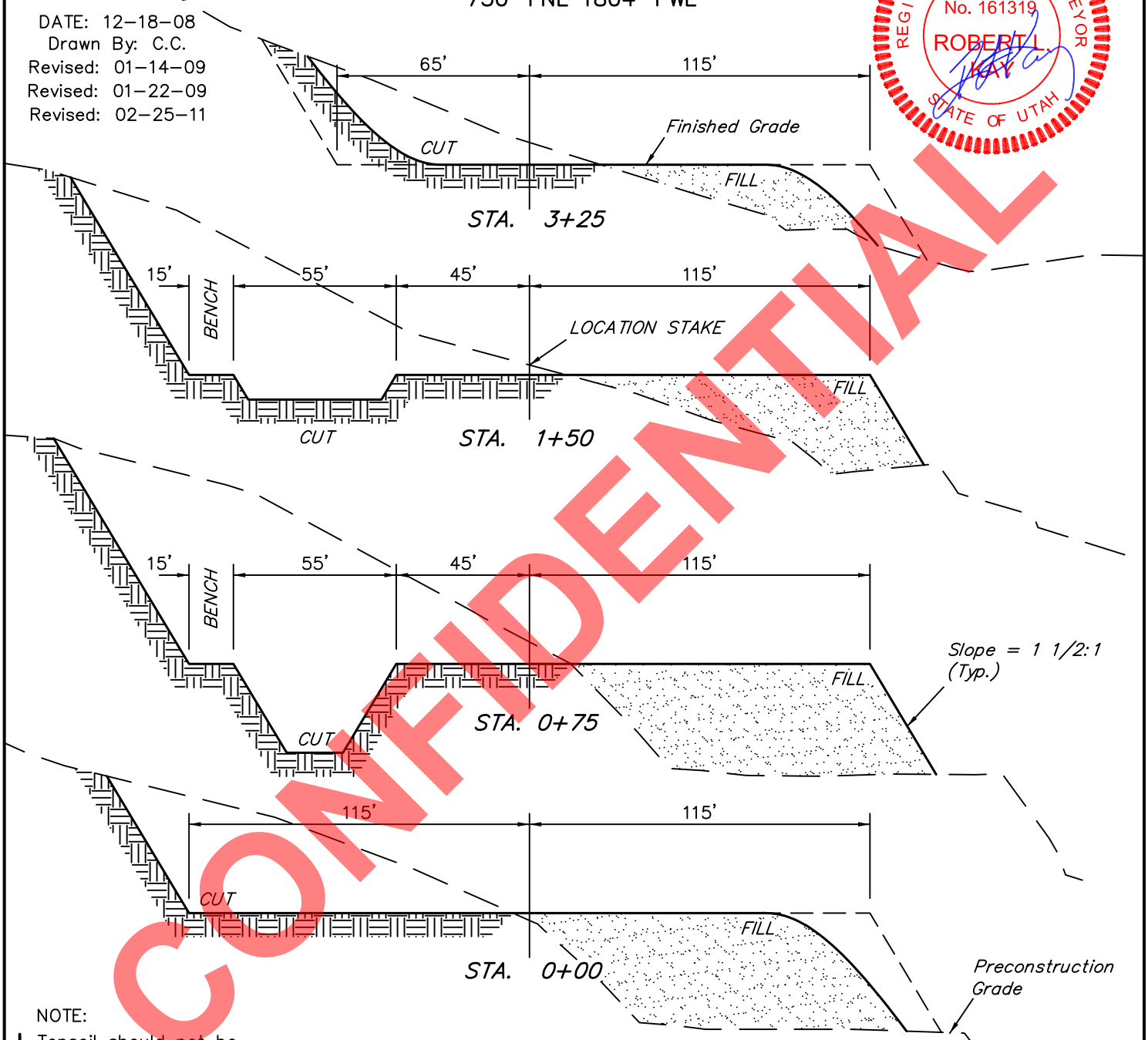
GDU #63-5-12
SECTION 5, T6S, R3W, U.S.B.&M.
750' FNL 1804' FWL

FIGURE #2

1" = 20'
X-Section Scale
1" = 50'

DATE: 12-18-08
Drawn By: C.C.
Revised: 01-14-09
Revised: 01-22-09
Revised: 02-25-11

REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH



NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ±2.479 ACRES
ACCESS ROAD DISTURBANCE = ±0.165 ACRES
TOTAL = ±2.644 ACRES

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

(6") Topsoil Stripping	= 1,840 Cu. Yds.
Remaining Location	= 18,830 Cu. Yds.
TOTAL CUT	= 20,670 CU.YDS.
FILL	= 13,080 CU.YDS.

EXCESS MATERIAL	= 7,590 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,990 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 4,600 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
*85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017*

API Well Number: 43013508970000

Vantage Energy Uinta LLC

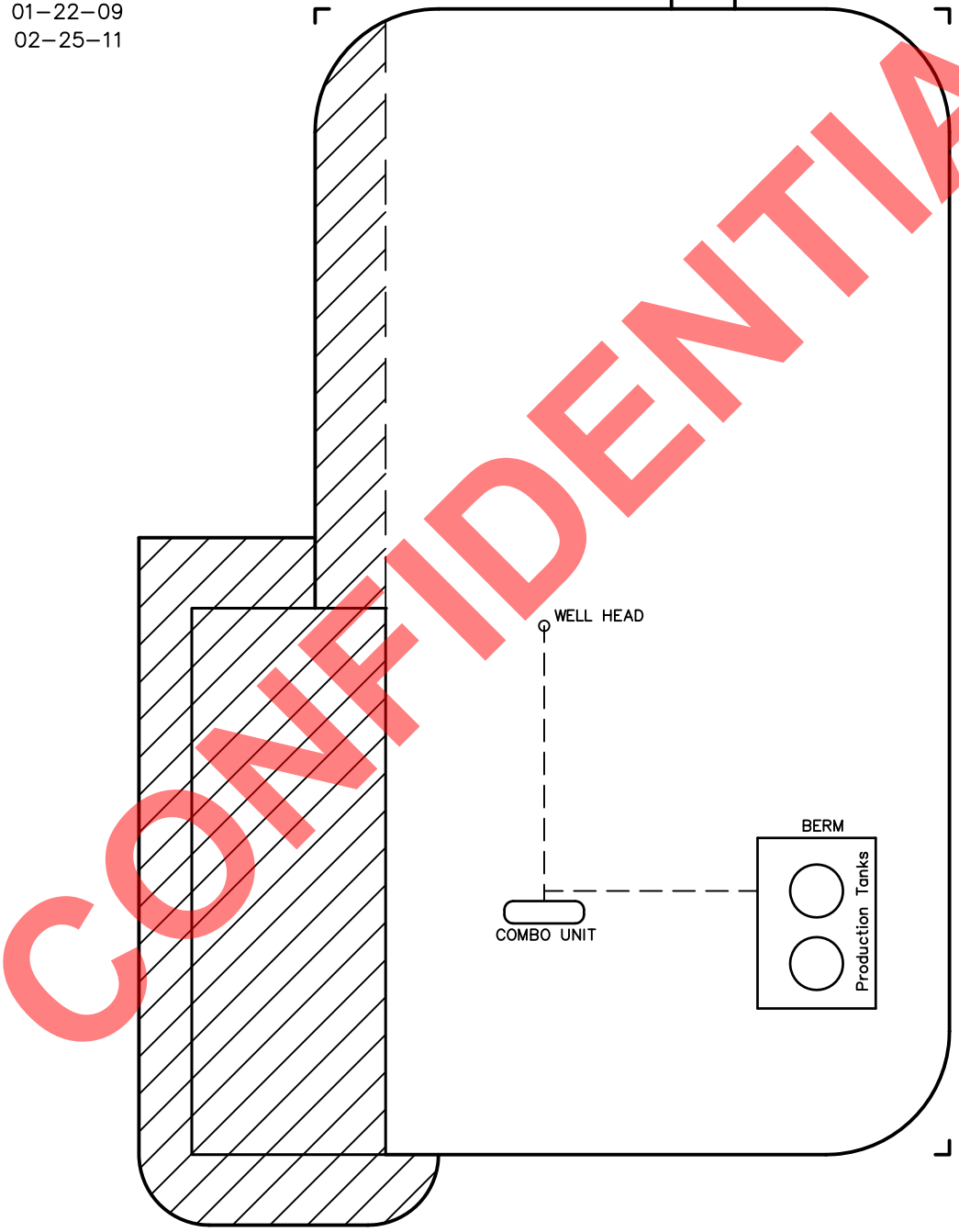
PRODUCTION FACILITY LAYOUT FOR

GDU #63-5-12
SECTION 5, T6S, R3W, U.S.B.&M.
750' FNL 1804' FWL

FIGURE #3

SCALE: 1" = 50'
DATE: 12-18-08
Drawn By: C.C.
Revised: 01-14-09
Revised: 01-22-09
Revised: 02-25-11

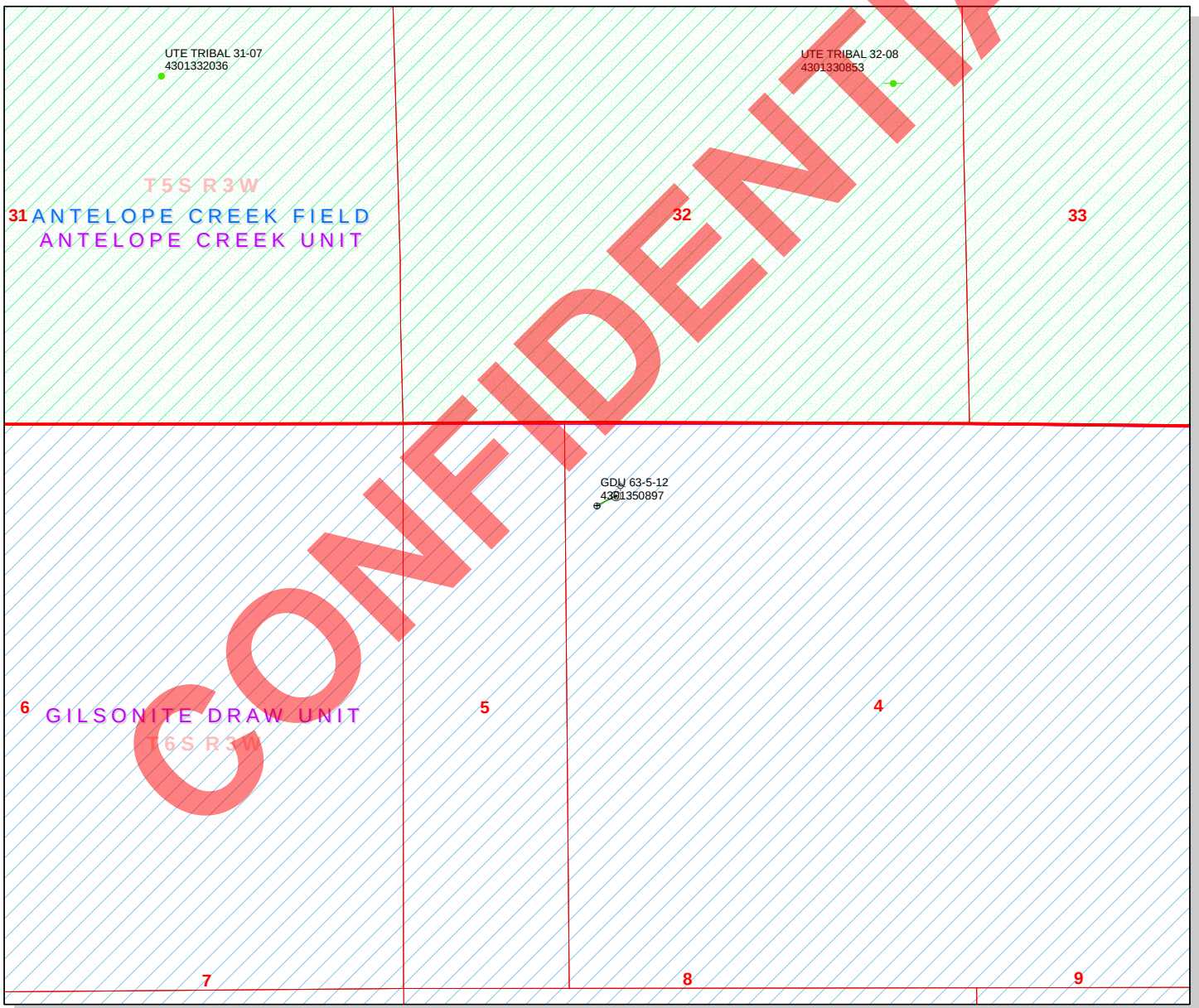
REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH



RE-HABED AREA

UINTAH ENGINEERING & LAND SURVEYING
*85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017*

API Well Number: 43013508970000



API Number: 4301350897

Well Name: GDU 63-5-12

Township T0.6 . Range R0.3 . Section 05

Meridian: UBM

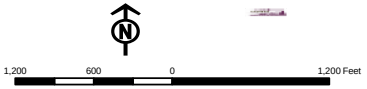
Operator: VANTAGE ENERGY UINTA LLC

Map Prepared:
Map Produced by Diana Mason

Units
STATUS
ACTIVE
EXPLORATORY
GAS STORAGE
NF PP OIL
NF SECONDARY
PI OIL
PP GAS
PP GEOTHERML
PP OIL
SECONDARY
TERMINATED

Fields
STATUS
Unknown
ABANDONED
ACTIVE
COMBINED
INACTIVE
STORAGE
TERMINATED
Sections
Township

Wells Query
Status
APD - Aproved Permit
DRL - Spuded (Drilling Commenced)
GIW - Gas Injection
GS - Gas Storage
LA - Location Abandoned
LOC - New Location
OPS - Operation Suspended
PA - Plugged Abandoned
PGW - Producing Gas Well
POW - Producing Oil Well
RET - Returned APD
SGW - Shut-in Gas Well
SOW - Shut-in Oil Well
TA - Temp. Abandoned
TW - Test Well
WDW - Water Disposal
WIW - Water Injection Well
WSW - Water Supply Well



1:11,423

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

July 29, 2011

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Gilsonite Draw Unit, Duchesne County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well is planned for calendar year 2011 within the Gilsonite Draw Unit, Duchesne County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Green River)		
43-013-50897	GDU 63-5-12	Sec 05 T06S R03W 0750 FNL 1804 FWL BHL Sec 05 T06S R03W 0660 FNL 1980 FWL

This office has no objection to permitting the well at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard
DN: cn=Michael L. Coulthard, o=Bureau of Land Management, ou=Branch of Minerals, email=Michael_Coulthard@blm.gov, c=US
Date: 2011.07.29 09:20:58 -06'00'

bcc: File - Gilsonite Draw Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

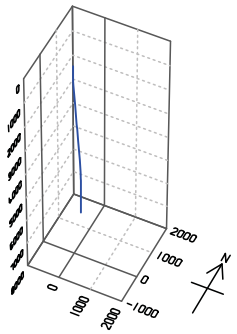
MCoulthard:mc:7-29-11

API Well Number: 43013508970000

VANTAGE ENERGY

Project:	DUCHESNE COUNTY, UT
Site:	GDU 63-5-12
Well:	GDU #63-5-12
Wellbore:	GDU #63-5-12
Design:	Design #1
Latitude:	39° 59' 37.820 N
Longitude:	110° 14' 59.190 W
GL:	6773.00
KB:	WELL @ 6788.00ft (Original Well Elev)
RIG:	Original Well Elev

Weatherford



WELL DETAILS: GDU #63-5-12

Ground Level: 6773.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	7168927.39	1990669.44	39° 59' 37.820 N	110° 14' 59.190 W	

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL GDU #63-5-12	6200.00	90.05	176.66	39° 59' 38.710 N	110° 14' 56.920 W	Point

SECTION DETAILS

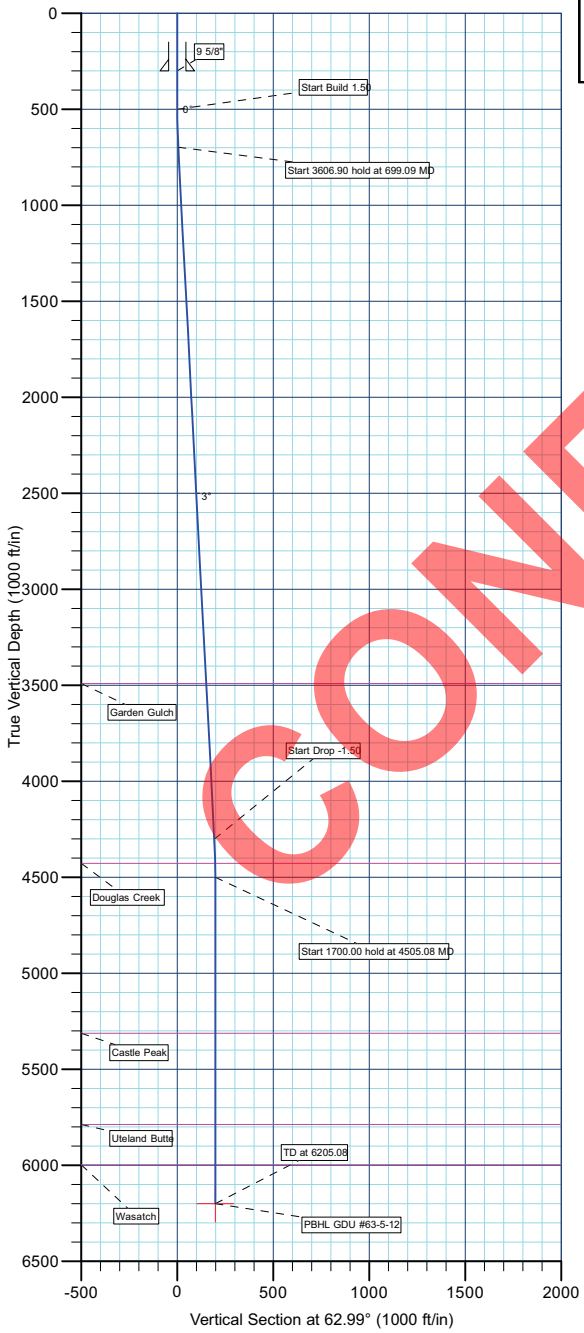
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
699.09	2.99	62.99	699.00	2.36	4.62	1.50	62.99	5.19	Start 3606.90 hold at 699.09 MD
4305.99	2.99	62.99	4301.00	87.70	172.04	0.00	0.00	193.10	Start Drop -1.50
4505.08	0.00	0.00	4500.00	90.05	176.66	1.50	180.00	198.28	Start 1700.00 hold at 4505.08 MD
6205.08	0.00	0.00	6200.00	90.05	176.66	0.00	0.00	198.28	TD at 6205.08

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3491.00	3494.89	Garden Gulch
4428.00	4433.07	Douglas Creek
5313.00	5318.08	Castle Peak
5788.00	5793.08	Uteland Butte
5998.00	6003.08	Wasatch

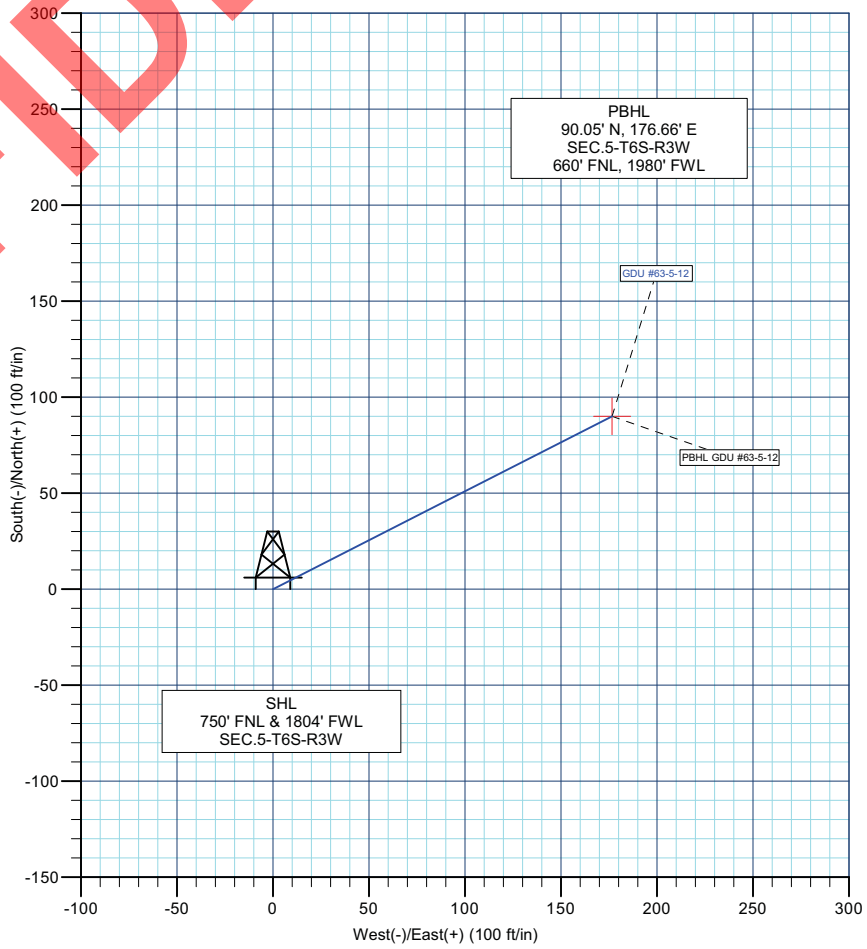
CASING DETAILS

TVD	MD	Name	Size
300.00	300.00	9 5/8"	9-5/8



Azimuths to True North
Magnetic North: 11.45°

Magnetic Field
Strength: 52207.4snT
Dip Angle: 65.74°
Date: 3/1/2011
Model: BGGM2010



Plan: Design #1 (GDU #63-5-12/GDU #63-5-12)

Created By: TRACY WILLIAMS Date: 11:12, March 01 2011

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 7/26/2011 **API NO. ASSIGNED:** 43013508970000
WELL NAME: GDU 63-5-12
OPERATOR: VANTAGE ENERGY UINTA LLC (N3295) **PHONE NUMBER:** 303 820-4480
CONTACT: David F. Banko

PROPOSED LOCATION: NENW 05 060S 030W **Permit Tech Review:** ☑
SURFACE: 0750 FNL 1804 FWL **Engineering Review:** ☐
BOTTOM: 0660 FNL 1980 FWL **Geology Review:** ☑
COUNTY: DUCHESNE
LATITUDE: 39.99387 **LONGITUDE:** -110.24895
UTM SURF EASTINGS: 564117.00 **NORTHINGS:** 4427137.00
FIELD NAME: UNDESIGNATED
LEASE TYPE: 1 - Federal
LEASE NUMBER: UTU78235 **PROPOSED PRODUCING FORMATION(S):** WASATCH
SURFACE OWNER: 1 - Federal **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** FEDERAL - LPM8907971
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** 49-1501
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit: GILSONITE DRAW

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

Board Cause No: R649-3-11
Effective Date:
Siting:

- ☑ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
4 - Federal Approval - dmason
15 - Directional - dmason
23 - Spacing - dmason

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: GDU 63-5-12
API Well Number: 43013508970000
Lease Number: UTU78235
Surface Owner: FEDERAL
Approval Date: 8/1/2011

Issued to:
VANTAGE ENERGY UINTA LLC, 116 Inverness Drive East, Ste 107, Englewood , CO 80112

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-11. The expected producing formation or pool is the WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Notification Requirements:

API Well No: 43013508970000

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:

For John Rogers
Associate Director, Oil & Gas

Sundry Number: 27589 API Well Number: 43013508970000

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU78235

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: GILSONITE DRAW

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: GDU 63-5-12

2. NAME OF OPERATOR: VANTAGE ENERGY UINTA LLC

9. API NUMBER: 43013508970000

3. ADDRESS OF OPERATOR: 116 Inverness Drive East, Ste 107 , Englewood , CO, 80112

PHONE NUMBER: 303 386-8600 Ext

9. FIELD and POOL or WILDCAT: UNDESIGNATED

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0750 FNL 1804 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 05 Township: 06.0S Range: 03.0W Meridian: U

COUNTY: DUCHESNE

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/1/2012	☐ ACIDIZE	✓ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This Sundry Notice is being submitted to notify the Utah Division of Oil, Gas, and Mining that Vantage Energy Uinta LLC is altering the surface casing from 300' to 500' for the above referenced well.

Accepted by the Utah Division of Oil, Gas and Mining

Date: July 12, 2012

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
David F. Banko	303 820-4480	Permit Agent
SIGNATURE N/A		**DATE** 7/9/2012

RECEIVED: Jul. 09, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU78235

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: GILSONITE DRAW

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: GDU 63-5-12

2. NAME OF OPERATOR: VANTAGE ENERGY UINTA LLC

9. API NUMBER: 43013508970000

3. ADDRESS OF OPERATOR: 116 Inverness Drive East, Ste 107 , Englewood , CO, 80112

PHONE NUMBER: 303 386-8600 Ext

9. FIELD and POOL or WILDCAT: UNDESIGNATED

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0750 FNL 1804 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 05 Township: 06.0S Range: 03.0W Meridian: U

COUNTY: DUCHESNE

STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 9/30/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Vantage Energy Uinta LLC is submitting this Sundry Notice to request an extension to the Application for Permit to Drill that was approved on August 1, 2011. Please see attachment for details. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: July 31, 2012

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
David F. Banko	303 820-4480	Permit Agent
SIGNATURE N/A		**DATE** 7/27/2012

Form 3160-3
(August 2007)

MAR 16 2011

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: UTU78235

6. If Indian, Allottee or Tribe Name: ---

7. If Unit or CA Agreement, Name and No.: Gilsonite Draw Uni UTU86249X

1a. Type of work: [X] DRILL [ ] REENTER

8. Lease Name and Well No.: GDU 63-5-12

1b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

2. Name of Operator: **Vantage Energy Uinta LLC**
E-mail: john.moran@vantageenergy.com
Contact: John Moran

9. API Well No.: 43-013-50897

3a. Address: 116 Inverness Drive East, Suite 107, Englewood CO 80112

3b. Phone No. *(include area code)*: 303-386-8600

10. Field and Pool, or Exploratory: Wildcat

4. Location of Well *(Report location clearly and in accordance with any State Requirements.*)*

At surface: 750' FNL 1,804' FWL NE /4 NW /4
Lat: 39.993839 Long: 110.249775

At proposed production zone: ±660' FNL ±1,980' FWL (NE/4 NW/4) Sec. 5 T6S R3W

11. Sec., T., R., M., or Blk. and Survey or Area: Sec. 5 T 6S R 3W
Meridian: U.S.B.&M.

14. Distance in miles and direction from nearest town or post office. *
Location is ±14.6 miles south of Bridgeland, Utah.

12. County or parish: Duchesne

13. State: Utah

15. Distance from proposed location to nearest property or lease line, ft. (Also nearest Drig, unit line, if any): Unit= ±660' Lease= ±660'

16. No. of acres in lease: 2,250.5

17. Spacing Unit dedicated to this well: 160

18. Distance from proposed location* to nearest well, drilling, completed or applied for, on this lease, ft.: Pinon Fed 1 ± 205 '

19. Proposed depth: 6,200' TVD

20. BLM/BIA Bond No. on file: LPM8907971 / UTB000288

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 6,773 ' GR

22. Approximate date work will start *: May 31, 2011

23. Estimated duration: 45–60 days drilling completion

RECEIVED
MAY 01 2013
DIV. OF OIL, GAS & MINING

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature: [signature] Name *(Printed/Typed)*: John J. Moran 303-386-8610 Date: March 16, 2011

Title: Senior Engineer Vantage Energy Uinta LLC

Approved by *(Signature)*: [signature] Name *(Printed/Typed)*: Jerry Kenczka Date: APR 25 2013

Title: Assistant Field Manager Lands & Mineral Resources Office: VERNAL FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached. CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

(continued on page 2)

NOS Posted 12/27/2010

*(Instructions on page 3)

NOTICE OF APPROVAL

AFMSS# 11SXS0185AE

DOGM

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078 (435) 781-4400

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**Vantage Energy Uinta LLC**	**Location:**	**NENW, Sec. 5, T6S, R3W**
Well No:	**GDU 63-5-12**	**Lease No:**	**UTU-78235**
API No:	**43-013-50897**	**Agreement:**	**Gilsonite Draw Unit**

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.

- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.

- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

Vantage 2013 Oil and Gas Project - Required Mitigations and Design Elements
Compiled by David Herron, Forest Geologist
February 28, 2013

Introduction
As part of the approval decision for the Vantage 2013 Oil and Gas Project, the following mitigations and conditions of approval are being required. These conditions are in addition to the design elements and mitigations already incorporated within lease stipulations, and within the Surface Use Plans of Operations affected by the decision for this project.

Some of the mitigations and design elements listed below apply to multiple resource areas. In such cases, the mitigations are usually listed under the first resource area to which they apply, and are not repeated for subsequent resource areas to which they might also apply.

General

- Closed loop drilling systems will be used, to eliminate the need for reserve pits, reduce closure and waste management costs, and reduce potential for contamination from leaking.

- Production equipment will be painted to better blend-in with the surrounding area. The specific color for each well site to be determined and provided by the Forest Service.

- Heavy equipment use, and well pad and road construction or reconstruction activities, is not allowed when soils are wet or frozen.

Interim and Final Reclamation

- Site specific interim reclamation plans will be submitted for each well pad proposal, giving details of interim pad size, facility location during production phase, revegetation methods to be used on cut/fill slopes, and potential sources for additional soil or soil amendments (should they be needed).

- The Operator will promptly seed and revegetate all disturbed areas not necessary for future operations, including well pad cut/fill slopes and road/pipeline rights of way. Revegetation shall commence immediately after construction, or immediately after the disturbed area is reclaimed or no longer needed for future operations.

- Seeding will be accomplished using a Forest Service approved seed mixture. Post-construction seeding applications will continue until determined successful by the Forest Service. Seeding should generally be done in spring (May 1 - June 15) or fall (October 1 - November 1). Fall seeding must be done when conditions are cold enough that seeds won't sprout before the following spring. Verify or create surface roughness in disturbed areas prior to seeding.

- All seed mixtures, erosion control materials, and reclamation materials used will be certified weed free.

- Interim reclamation will be conducted on all disturbed surfaces not needed for future operations, including portions of well pads no longer needed for future drilling activities. Where possible, interim reclamation efforts should begin within 6 months following pad construction and drilling activities. In cases where multi-well pads are not yet fully drilled, interim reclamation shall be initiated within 12 months following the most recent well drilled on the pad.

- During reclamation efforts, stockpiled topsoil materials shall be redistributed over disturbed areas evenly, avoiding undue mixing with deeper materials.

- Production facilities shall be located to allow for optimal reduction in well pad working size, following interim reclamation (for example near the center or entrance of the well pad).

- Final reclamation of a well pad will occur as soon as wells on that pad are no longer productive. Each well will be plugged, capped, and properly abandoned, and all surface equipment (including surface pipelines) associated with that pad will be removed. The well pad and associated cut and fill slopes will be recontoured to mimic adjacent natural topography, and disrupted drainage pathways will be restored. Previously salvaged soils will be spread over disturbed surfaces, which will then be seeded with vegetation (seed mix to be determined by the Forest Service). Sufficient erosion control for reclaimed sites is obtained when adequate groundcover is established, water naturally infiltrates into the soil, and gullying, head-cutting, slumping, and deep or excessive rilling are not observed.

Range / Weeds

- Fence well pads, as needed and as determined by the Forest Service, to prevent cattle from entering well pad areas.

- Fences and cattle guards damaged by project-related equipment or vehicles will be promptly repaired.

- Construction vehicles and equipment will be cleaned, power-washed, and free of soil and vegetation debris prior to entry and use of access roads to prevent transporting weed seeds.

- The Operator will implement a weed control program to identify and control weeds within and adjacent to project-related roads and facilities. Weed control will be conducted through an approved Pesticide Use and Weed Control Plan. Weed monitoring and reclamation measures will be continued on an annual basis (or as frequently as the AO determines) throughout the life of the project. Herbicides shall be selected from those approved for use on the Ashley National Forest.

Roads and Transportation

- Contractors and employees are required to comply with all posted speed limits.

- All construction/operations traffic and vehicles will be confined to the approved road ROW and well pads, or additional areas as specified in an approved APD. No cross-country travel by vehicles will be allowed.

- New road construction will be the minimum necessary for safely conducting the approved activity. When no longer required for this project, new roads will be closed by re-contouring to match local topography, followed by scarification and reseeding.

- All roads constructed by the operator will be closed to public motorized use through the use of Forest Service approved signs and gates. Signs and gates related to well pads and operator-constructed access roads will be properly maintained by the operator.

- Access roads associated with this project will be maintained and kept in good repair by the operator, during drilling, completion, and producing operations. Road maintenance will include grading, maintaining drainage, watering (as needed), fixing mud holes, cleaning cattle guards, snow removal, etc. Snow removal will be done in a manner approved by the Forest Service in order to reduce road surface loss and erosion.

- A detailed transportation plan must be submitted for Forest Service review, for all new road construction and road reconstruction from Forest Roads 337 and 207 to Well Pad GDU 63-4-11. This transportation plan must be reviewed and approved by the Forest Service, before well pad or road construction or reconstruction activities can begin. This transportation plan will include:

    - Detailed route alignments, engineered designs and drawings of improved channel crossings, gate locations, signage locations, operating road width, road drain features, erosion control measures, and road maintenance plans.

- Placement of a locked gate at or near the intersection with Forest Road 207. The gate and support posts will be signed "road closed" and "authorized vehicles only".
- A culvert for the spur road to Well Pad 63-6-24, where it crosses an ephemeral swale.
- Engineered design plans for culverts or hardened road drainage crossings, for the drainage crossing located between Road 207 and well pad GDU 63-5-12, and for ephemeral drainage crossings between Well Pads GDU 63-5-12 and GDU 63-5-24.
- Engineered design plans for any road sections crossing steep slopes or having road grades exceeding 5%.

- Road drainage crossings will be designed so they will not cause head-cutting, siltation or accumulation of debris in the channel. Additional review/permitting of road drainage crossings may be required from the U.S. Army Corps of Engineers (404 permit or General Permit 40) and from the State of Utah (401 permit or UPDES Storm-water Permit). It will be the responsibility of Vantage Energy to coordinate with these other agencies to determine if permitting is required.

- Open or low-water road drainage crossings shall include a boulder rock apron on the downstream side, with layers of cobble and gravel hardening the roadbed approaches.

- Needed culverts shall be sized by an engineer / hydrologist based on watershed area. Culvert inlets and outlets shall be hardened with boulder rock, to minimize erosion.

- New access roads and surface-disturbing activities will conform to the BLM Gold Book (BLM 2007) standards and/or Forest Service specifications.

- Graveling or capping the roadbed will be performed as necessary to provide and maintain safe and well constructed road.

- Appropriate water control structures for roads will be installed to control erosion. Check dams in new drainage ditches are needed for road grades in excess of 6%.

- Between well pads GDU 63-5-12 and GDU 63-5-24, the proposed access road crosses an existing unauthorized road. This unauthorized route must be closed on both sides of the new proposed road by ripping, seeding and placing vegetation for 100 feet.

- Gas gathering pipelines will be located in the 35-foot right-of-way along access roads, except as needed on a site-specific basis to resolve safety concerns, or to comply with other resource mitigation measures.

Water Resources

- A minimum 50-foot undisturbed vegetative buffer will be maintained between facilities (such as well pads, tank batteries, compressor stations) and ephemeral stream channels. In the case of

gullies/deeply incised channels, the buffer will be measured from the vertical banks of adjacent terraces. Needed new road and pipeline construction within this 50-foot buffer zone will be minimized and generally limited to perpendicular or near-perpendicular channel crossings.

- Site specific erosion control plans will be submitted for each well pad proposal, and will be subject to Forest Engineer and Forest Hydrologist review and approval, prior to construction. Erosion control plans will provide details of erosion control measures proposed, in order to divert overland flow away from working pad surfaces, and to retain sediments or other pollutants within the well pad/disturbance footprint. Designs shall include the use of engineered structures such as berms and diversion ditches, culverts, and sediment detention basins. Designs shall show areas on cut and fill slopes that will receive seeding, topsoil placement, surface roughening, mulch, erosion matting, rock/woody debris placements or other proposed stabilization measures.

- Erosion and spill control measures (such as perimeter berms, ditches and detention basins) shall be in place for well pads immediately following well pad construction, and before drilling activity commences.

- All produced waste water shall be contained in tanks surrounded by a plastic-lined earthen berm or other impermeable structures. The volume of this secondary containment structure will exceed 150% of the volume of the largest tank it surrounds.

- Drill cuttings and muds must be encapsulated with impermeable material in a cuttings pit, and buried with at least 4 feet of cover materials. Otherwise, the cuttings must be transported off Forest and disposed in a state-approved waste facility. Cuttings shall not be left exposed or incorporated into well pad surfaces or roads.

- For Well Pad 63-6-24, boulder rock shall be placed along the base of the fill slope between stakes 2 and 3, to reduce risk of erosion on eastern edge of alluvial fan. Also round the pad working surface at SW corner, so that the base of the fill slope catches at corner stake 2.

- For Well Pad 63-5-12, rock armoring of the cut slope may be needed where a swale enters the well pad footprint, if erosion-resistant bedrock is not encountered at that location. If fill material is placed against the cut slope in this area during interim reclamation, rock and other erosion control measures shall be placed on top of the fill to minimize erosion at this location.

Soil Resources

- To prevent erosion of disturbed soils, vegetation and/or structural measures to control erosion will be implemented as soon as possible after initial soil disturbance.

- Engineering practices will be implemented as needed to control erosion from disturbed surfaces. Such engineering measures may include straw bales, silt fences, mulching, use of fiber mats, cross slope trenching, contour furrows, rock dams, terracing, or other erosion control practices as deemed necessary by the Forest Service.

- Topsoil shall be removed and stockpiled prior to well pad construction. This shall include the top 6 inches of the soil profile, and shall avoid undue mixing of coarser or deeper materials. Include smaller surface vegetation and organic debris with the excavated soil so it becomes part of the soil stockpile.

- Topsoil materials will be stockpiled no more than 4 feet thick, and the amount of stockpiled material shall be recorded.

Cultural Resources

- Construction activities within cultural sites that do not meet National Register eligibility criteria will be monitored by a professional archaeologist approved by the Forest Archaeologist. Specifically, site 42DC3372 / AS-2346 will be monitored along Forest Road 207 during road construction or reconstruction activities. The proponent will coordinate with the Forest Archaeologist in regards to specific locations and requirements for monitoring.

- Gas pipelines will be placed adjacent to approved access roads to ensure that pipeline routes do not impact cultural resource sites. Alternate routes must be reviewed by the Forest Archaeologist.

- All personnel, subcontractors, and consultants associated with the project will refrain from collecting or damaging archaeological resources on Ashley National Forest Lands. This will be accomplished by complying with the process and guidelines outlined in the document "Ashley NF Archaeological Rules and Restrictions for Oil and Gas Development".

- If cultural resources are inadvertently discovered, construction activities will be halted within 100 feet of the discovery, and the Forest Service will be notified. The Forest Service and proponent will then follow the process outlined in the document "Ashley NF Cultural Resource Inadvertent Discovery Plan". Operations within 100 feet of the discovery area will not resume until authorization to proceed has been received from the Forest Service.

Paleontological Resources

- Paleontological monitoring of surface-disturbing activities will be required during construction of the GDU 63-6-24 and GDU 63-7-31 well pad sites. Paleontological monitoring may involve concurrent observation of all construction activities within a given construction area, or may consist of periodic spot-checking and salvage of observed fossil resources, as determined by the Forest Service on an ongoing case-by-case basis.

- Any significant fossils identified during paleontological surveys or monitoring efforts will be collected by a qualified paleontologist, properly documented, and transferred to a Forest Service-approved paleontological repository for curation.

- If significant paleontological resources are discovered, construction activities will be halted and the Forest Service notified. Ground disturbing operations in the area of the discovery will not resume until authorization to proceed has been received from the Forest Service.

Wildlife

- Well pad and road construction, road upgrades, and drilling operations will not occur between November 15th and April 30th, to protect elk winter range.

- Pump jacks will be equipped with high grade mufflers, to reduce noise impacts to wildlife and Forest visitors.

- Prior to ground disturbing activities within the migratory bird nesting season (May 15–June 30), surveys for BCC and PIF priority species will be conducted. If any of these species are detected during the surveys, a nest search will be conducted. If nests are found or are suspected, then no ground-disturbing activities will be allowed from May 15–June 30 within 0.1 mile of the nest or estimated location of the nest.

- Ground surveys of the proposed Project Area will be conducted prior to construction activities to identify active or potentially active golden eagle nest sites. If golden eagle nests are detected within the Project Area, the following mitigation measures will be implemented to protect nesting golden eagles.

    - No permanent surface occupancy will be allowed within 0.5 mile of an active golden eagle nest to reduce the risk of decreased productivity or nest failure, unless topography eliminates the risk of abandonment.

    - Unless topography eliminates the risk of nest abandonment, no temporary project activities can occur within a 0.5 mile buffer of an occupied golden eagle nest between April 30 and August 31.

    - Shielding pipeline installation equipment, well sites, and other facilities with camouflage netting, where there is line of sight from active nests to the activity.

Air Quality

- The Operator will use drill rigs that meet the EPA Tier II emission standards or better for the life of the project (LOP).

- The Operator will conduct green completions to minimize natural gas/methane and volatile organic compound (VOC) emissions.

- The Operator will direct natural gas flowing from newly completed wells into the sales pipeline, or use it for fuel gas for on-site heaters and the pump jack engine.

- The Operator will install pump jack engines that meet the applicable New Source Performance Standards (NSPS) emission limits for pump jack engines.

- The Operator will install emission controls on condensate tank batteries and dehydrators with control efficiencies of greater than 95%.

- The Operator will test the efficiency of controls annually and ensure that flaring/combustors meet >90% efficiency.

- The Operator will install viton/teflon seals for chemical and cold weather service (Enardo thief hatches and Stack Vents) on hatches and valves.

- The Operator will ensure that the design of VOC collection systems (piping, valves, etc.) are adequate for control systems for the LOP.

- The Operator will install low/no bleed pneumatic controllers and valves on all new equipment.

- The Operator will route pneumatic pump emissions to either emission control devices, or back into the process stream to eliminate emissions.

- The Operator will install secondary control systems on project-related compressor engines to reduce emissions. Potential secondary control systems include the following.

    - Installation of new ultra lean burn engines with oxidation catalysts and turbochargers.
    - Installation of rich burn engines equipped with three-way catalysts as a secondary control measure.

- The Operator will implement a leak detection program that is consistent with EPA Method 21, once gas production has ramped up to the point where compression is needed.

    - Leak detection surveys will be conducted on a quarterly basis, the results documented, and repairs made on a timely basis where leaks are detected.
    - A Leak Detection Plan will be submitted to the Forest Service and/or EPA for approval.
    - The leak detection limit will be 10,000 parts per million (ppm) of methane. If a leak is discovered during an inspection, the leaking piece of equipment will be tagged, and the appropriate personnel will be notified. The tag will remain in place until the leak is repaired and re-sampled to verify the leak is no longer occurring.
    - Leaks at or above 10,000 parts per million (ppm) will be repaired within 15 days. An exception to this repair schedule will be if the leak is occurring on an essential component, where the repair will require the shutdown of a critical process unit that will affect operation of the proposed project. An example will be the shutdown of a compressor serving 25% of the field. If a leak above 10,000 ppm is discovered on a critical process unit, the leak will be repaired during the next scheduled shut down of the equipment for maintenance or other repairs, but will not exceed one year from the date of leak discovery.
    - Leak findings and repairs will be documented.

- To minimize fugitive dust during construction and production phases, roads need to be graveled in areas where the forest engineer deems road conditions necessitate addition of gravel to minimize dust.

- Keep vehicle speeds at or below 25 miles per hour within the project area to minimize dust.

- Dust abatement measures, including water (not production water) shall be used to minimize fugitive dust at well pads and production roads, and is required on roads during construction and drilling operations. Some form of dust abatement is a state requirement for construction activities.

- All air polluting equipment and machinery during all phases of oil and gas development must meet state and federal requirements.

- Operator will request that the engines of its contractor's vehicles be properly maintained to minimize engine emissions.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- Additional cement required, for Cementing Program covering Production Casing strings. Top of cement for Production Casing string Cementing Program is Surface.
- Production casing cement shall be brought up and into the surface.
- Surface casing cement shall be brought to surface.
- A variance is granted for Onshore Order #2 Drilling Operations III.E. "Blooie line discharge 100 feet from well bore and securely anchored" Blooie line can be 35 feet. All requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III.E.1. Drilling Operations, Special Drilling Operations, air/gas drilling.
- For the daily drilling report, Covering air/gas drilling operations on the first day (when the surface hole is first drilled), operator shall note in the report the volume of water in units of barrels out on location, stored in pits-tanks.
- A BOPE system rated at 2M is the requirement, per the specifications of Onshore Order #2. The BOPE equipment shall be tested to 2M BOPE test requirements.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.

- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.

- No aggressive/fresh hard-banded drill pipe shall be used within casing.

- **Cement baskets shall not be run on surface casing.**

- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- **Please submit an electronic copy of all other logs run on this well in CD (compact disc) format to the Vernal BLM Field Office. This submission will supersede the requirement for submittal of paper logs to the BLM.**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.

- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.
    - Well name and number.
    - Well location (¼¼, Sec., Twn, Rng, and P.M.).
    - Date well was placed in a producing status (date of first production for which royalty will be paid).
    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
    - Unit agreement and/or participating area name and number, if applicable.
    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

October 8, 2013

Vantage Energy Uinta LLC
116 Inverness Drive East, Ste. 107
Englewood, CO 80112

Re: APD Rescinded – GDU 63-5-12, Sec. 5, T. 6S, R. 3W, Duchesne County, Utah API No. 43-013-50897

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on August 1, 2011. On July 31, 2012, the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective October 8, 2013

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
Bureau of Land Management, Vernal

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114 -5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR
OIL, GAS & MINING